Cancer Incidence and Mortality in Nebraska: 2000

July, 2003

The Nebraska Cancer Registry contains a wealth of information, not all of which can be included in this summary report:

What types of data are available?

- Demographic information: age at diagnosis, gender, race/ethnicity, county of residence
- Medical history: diagnosis, primary site, cell type, stage of disease at diagnosis
- Therapy: surgery, radiation therapy, chemotherapy, immunotherapy, hormone therapy
- Follow-Up: length of survival, cause of death

Who may request data from the Nebraska Cancer Registry?

- Medical Researchers
- Health Planners
- Marketing Researchers
- Health Care Facility Administrators
- Physicians
- Nurses
- Health Care Facility Cancer Committees
- Oncology Conference Planners and Speakers
- Patient Care Evaluators
- Pharmaceutical Companies
- Government Officials
- Concerned Citizens
- Students

How do I make a request?

Contact the Data Management Section at the
Nebraska Health and Human Services System
Department of Regulation and Licensure
P.O. Box 95007, Lincoln, NE 68509-5007
Phone 402/471-2241, Monday-Friday between 8 am and 5 pm

Please note: To comply with confidentiality regulations, the NHHSS reserves the right to limit the amount and type of data that are released in response to a request.

NEBRASKA CANCER REGISTRY
2000 ANNUAL REPORT

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INTRODUCTION

This publication represents the 14th annual statistical summary of the Nebraska Cancer Registry (NCR) since it began collecting data in 1987. The purpose of this report is to present the registry's most recent data to the citizens of the State of Nebraska. The majority of the data cover cancer diagnoses and cancer deaths that occurred between January 1, 2000 and December 31, 2000, as well as during the past five years (January 1, 1996-December 31, 2000).

The NCR was founded in 1986, when the Nebraska Unicameral authorized funding for a state cancer registry using a portion of funds generated by the state's cigarette tax. The establishment of the registry successfully combined the efforts of many Nebraska physicians, legislators, concerned citizens, and the Nebraska Medical Foundation, all of whom had worked for years toward this goal. The Nebraska Medical Foundation also helped to establish the registry with financial assistance. Since 1994, the NCR has received additional funding from the Centers for Disease Control and Prevention.

The Nebraska Health and Human Services System (NHHSS) currently manages the NCR, although data collection and editing are performed by the Nebraska Methodist Hospital of Omaha, under contract to the Nebraska Medical Foundation. Analysis of registry data and preparation of the annual statistical report is the responsibility of the NHHSS.

The purpose of the registry is to gather data that describe how many Nebraska residents are diagnosed with cancer, what types of cancer they have, what type of treatment they receive, and how long they survive after diagnosis. These data are extensively utilized, both inside and outside of the NHHSS. Within the agency, they are monitored closely from year to year to determine the trends that are developing, and to see how Nebraska's cancer experience compares to the rest of the nation. They are indispensable for investigating reports of possible cancer clusters. The NHHSS also uses these data to help with the planning and evaluation of its cancer control programs. Outside of the NHHSS the registry has furnished information to many individuals, institutions such as the Centers for Disease Control and Prevention (CDC) and the North American Association of Central Cancer Registries (NAACCR); as well as research organizations, including the University of Nebraska Medical Center (UNMC), the National Cancer Institute (NCI), and the American Cancer Society (ACS). Nebraska cancer data are included in national databases mentioned in the Methodology section (page 3) of this report.

The above uses involve summarized, aggregate statistics that are compiled from registry data. However, all individual records in the cancer registry are kept in strict confidence as prescribed in both state and federal law. The NCR follows all of the privacy safeguards in the Health Insurance Portability and Accountability Act (HIPAA) although some of the procedural requirements do not apply to the registry.

The NHHSS welcomes inquiries about cancer from the public for aggregate statistics or general information from the registry. To obtain cancer data or information about the registry not included in this report, please refer to the instructions provided inside the front cover. For more information about cancer control activities within the NHHSS, please call the Division of Health Services at 402/471-6038, or write to the Division at P.O. Box 95044, Lincoln, NE 68509-5044.

An electronic copy of this report is now available to Internet users via the NHHSS web site. The URL address is http://www.hhs.state.ne.us/srd/srdindex.htm.

METHODOLOGY

Data Collection and Management

The NCR gathers data on Nebraska residents diagnosed and treated for invasive and in situ tumors. Benign tumors (except for benign brain and other central nervous system tumors that we will begin reporting January 1, 2004), benign polyps, basal cell carcinomas of the skin, and in situ and localized squamous cell carcinomas of the skin are excluded from the registry. Information collected on each case includes the patient's name, address, birthdate, race, gender, and Social Security number; date of diagnosis; primary site of the cancer (coded according to the International Classification of Diseases for Oncology, 2nd edition [ICD-O-2]); stage of disease at diagnosis; facility where the initial diagnosis was made; basis of staging; method of diagnostic confirmation; and histological type (also classified according to the ICD-O-2). Follow-up information is gathered periodically on registered cases, and includes the date of last contact with the patient, status of disease, type of additional treatment, quality of survival; and, if death has occurred, the date and cause of death and the status of the cancer at the time of death. The registry gathers this information from every hospital in the state for all persons diagnosed with and/or treated for cancer. In addition, the registry includes Nebraska residents who are diagnosed with and/or treated for cancer out of state. NCR data also include cases diagnosed and/or treated at pathology laboratories, radiation therapy sites, physician's offices, and cases identified from death certificates.

Nebraska cancer mortality data are obtained from death certificates on file with the NHHSS. Mortality data are available for every Nebraska resident who dies from cancer, whether death occurs in or outside of Nebraska. The mortality data presented in this report are limited to those deaths where cancer is listed as the underlying (i.e., primary) cause of death. For deaths that occurred in 1999 and 2000, causes of death are coded according to the Tenth Edition of the International Classification of Disease (ICD-10). For deaths that occurred prior to 1999, causes of death are coded according to the Ninth Edition of the International Classification of Disease (ICD-9).

U.S. cancer incidence and mortality data are taken from the most recent annual statistical summary report of the National Cancer Institute's Surveillance, Epidemiology, and End Results (SEER) Program. The SEER Program compiles incidence data from a select group of cancer registries located throughout the United States, and these data provide estimates of national cancer incidence. The mortality data are compiled by the National Center for Health Statistics and include all cancer deaths occurring in the United States, with cancer deaths defined as only those deaths for which cancer is listed as the underlying cause.

Confidentiality

All data obtained by the NCR from the medical records of individual patients are held in strict confidence by the NHHSS. As specified in state statute, researchers may obtain case-specific and/or patient-identifiable information from the registry by submitting a written application that describes how the data will be used for scientific study. In situations where contact with a patient or patient's family is proposed, the applicant must substantiate the need for any such contact and submit approval from an Institutional Review Board. In addition, before any individual's name can be given to a researcher, the registry's staff will have to have permission from the person that would be a research subject. Upon favorable review by the NHHSS, the applicant must also agree to maintain the confidentiality and security of the data throughout the course of

the study, to destroy or return the registry data at the end of the study and present material for publication to the registry to be sure that no identifiable information is released.

Aggregate data (i.e., statistical information) from the registry are considered open to the public and are available upon request. Details on how to obtain such data are provided inside the front cover of this report.

Quality Assurance

The NCR and reporting facilities spend a great deal of time and energy to ensure that the information they gather is both accurate and complete. In recent years, these efforts have met with great success. For six consecutive years (1995-2000), the NCR has met all of the criteria necessary to earn the Gold Standard of data quality awarded by the North American Association of Central Cancer Registries (NAACCR). These criteria include:

1) Completeness of case ascertainment – The registry must find at least 95% of the total number of cases that are estimated to have occurred.

2) Completeness of information – The proportion of registry cases missing information on age at diagnosis, gender, and county of residence must be no more than 2%, and the proportion missing information on race must be no more than 3%.

3) Data accuracy – Error rates based on edit checks of selected data items must be no greater than 1%.

4) Timeliness – All data for a single calendar year must be submitted to the NAACCR for review no more than 23 months after the year has ended.

Gold standard certification also requires that all cases pass strict edits and that the proportion of registry cases found solely through a review of death certificates must be no more than 3%. Lastly, the proportion of duplicate cases in the registry must be no more than one per 1,000.

Since the NCR has achieved the highest quality standards Nebraska data are included in several national databases. These national databases only include data from registries that maintain high quality data. Nebraska data are accessible in the following databases that are all available on the internet:

1) *Cancer in North America: 1996-2000* (http://www.naaccr.org/stats/CINAPubs.html)
2) *United States Cancer Statistics: 1999 Incidence* (http://www.cdc.gov/cancer/npcr/uscs/index.htm)
3) *ACS' Cancer Facts & Figures 2003* (http://www.cancer.org/docroot/STT/stt_0.asp)
4) *Cancer Control PLANET* (http://cancercontrolplanet.cancer.gov/).

Definitions

Several technical terms are used in presenting the information in this report. The following definitions are provided here to assist the reader.

Incidence rate
An incidence rate is the number of new cases of a disease that occur within a specific population, divided by the size of the population. For example, if 10 residents of a county with 20,000 residents are diagnosed with colorectal cancer during a single year, then the incidence rate for that county for that year is .0005. Since cancer incidence rates are usually expressed per 100,000 population, this figure is then multiplied by 100,000 to yield a rate of 50 per 100,000 per year.

Mortality rate
A mortality rate is the number of deaths that occur within a specific population, divided by the size of the population. Only those persons whose death certificate lists cancer as the underlying (i.e., primary) cause of death are included in a cancer mortality rate. Like incidence rates, mortality rates are usually expressed as the number of deaths per 100,000 population.

Age-adjusted rate
Age-adjustment is a simple mathematical procedure that makes it possible to compare rates between populations that have different age distributions, and to compare rates within a single population over time. This edition of the NCR's annual report is the second in which all incidence and mortality rates were age-adjusted using the United States population in 2000 as the standard. Rates presented in pre-1999 editions of this report were age-adjusted using the U.S. population in 1970 as the standard. **For this reason, the rates presented in this report can not be compared to those presented in previous reports.**

Stage of Disease at Diagnosis

In situ
Cases diagnosed as in situ include malignant tumors that are confined to the cell group of origin, and have not penetrated the supporting structure of the organ on which they arose.

Invasive
Cases diagnosed as invasive include malignant tumors that, unlike in situ tumors, have at least penetrated the supporting structure of the organ where they originated, and may have spread further. Invasive tumors are subdivided into three categories:

Localized--A localized invasive tumor has not spread beyond the boundaries of the organ where it originated.

Regional--A regional invasive tumor has spread beyond the limits of the organ of origin, by direct extension to immediately adjacent organs or tissues and/or by spread to regional lymph nodes.

Distant--A distant invasive tumor has spread beyond its original (primary) site to distant parts of the body.

Data Analysis

Most of the incidence and mortality rates presented in this report were calculated for cancer diagnoses and deaths that occurred during 2000 and 1996-2000 combined. The incidence and mortality rates that are based on five years of data should be interpreted as the average annual rates that occurred between 1996 and 2000. Rates for 2000 were calculated using 2000 population counts recorded by the United States Bureau of the Census, while the 1996-2000 rates were calculated using 1998 population estimates developed by the Census Bureau.

All of the data presented in this report are current through April 1, 2003. However, because some cases diagnosed during or even before 2000 may not yet have been reported to the registry, the incidence data presented in this report should be considered subject to change. **In addition, the incidence data reported in previous editions of this publication should no longer be considered complete.**

With the exception of bladder cancer, all of the site-specific incidence rates in this report were calculated with invasive cases alone to maintain comparability with statistics from the SEER Program and other cancer registries throughout the United States. For bladder cancer, however, both the NCR and the SEER Program calculate bladder cancer incidence rates with in situ and invasive cases combined. All incidence and mortality rates in this report were calculated per 100,000 population, and were age-adjusted according to the age distribution of the population of the United States in 2000. Statewide rates were also calculated for males and females separately, and for both sexes combined. Rates based on five or fewer events are not presented due to their unreliability. Also, the number of cases for any county with five or fewer cases in a single year is not shown in order to reduce the possibility of identifying a specific person.

In Tables 2 and 5-13, differences between state and county rates were evaluated for statistical significance. Confidence intervals for each rate were calculated using the formula $CI = r \pm (RC \times SE)$, where CI = confidence interval, r = rate, RC = reliability coefficient, and SE = standard error. The standard error for each rate was determined by dividing the rate by the square root of the number of events (cancer diagnoses or deaths). This assumes that a Poisson distribution is appropriate. The level of statistical significance used to compare rates (and determine reliability coefficients) was determined for each table using the Bonferroni method. This method divides the overall desired level of statistical significance (in this case, 5%) by the number of statistical comparisons being made. The number of comparisons varied by table since county rates based on five or fewer cases were excluded. As a result, reliability coefficients also varied by table. A statistically significant difference exists and is indicated in those instances where the confidence intervals of a county rate and the state rate do not intersect.

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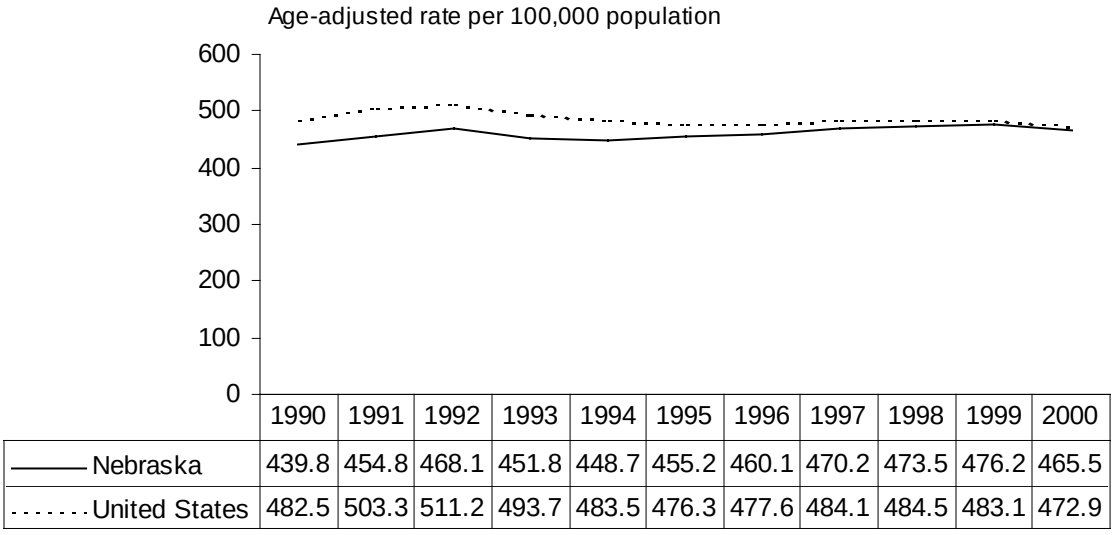
CANCER INCIDENCE IN NEBRASKA

The Nebraska Cancer Registry recorded 8,844 diagnoses of cancer among Nebraska residents in 2000. Of this number, 8,206 were invasive cancers and 635 were in situ cancers (three cases did not provide this information). The in situ figure does not include 175 in situ bladder cancers, which were, as explained on page 5, counted as invasive cases. The 2000 data show a slight increase from 1999, when 8,805 diagnoses (8,239 invasive, 566 in situ) were reported. Excluding in situ cases, Nebraska's 2000 cancer diagnoses translate into an annual incidence rate of 465.5 cases per 100,000 population, compared to the 1999 rate of 476.2. By site of origin (i.e., primary site), cancers of the lung, breast, prostate, colon and rectum occurred the most frequently, accounting for more than half (57.5%) of the state's invasive diagnoses in 2000.

Table 1 presents the number and rate of invasive cases diagnosed among Nebraska residents during 2000 and 1996-2000, for all sites combined and for cancers of specific sites. National incidence rate estimates for the year 2000 from SEER are also presented. Comparison of state and national rates shows that, for all sites combined and for most individual sites, the incidence of cancer in Nebraska is the same as or lower than that experienced by Americans as a whole. Table 2 presents the number of invasive cancers diagnosed and the incidence rates for 2000 and 1996-2000 by county of residence, with comparable statewide and national rates included. The graph below presents the annual incidence rates for cancer (all sites) for Nebraska and the United States since 1990.

Cancer (All Sites) Incidence Rates, By Year

Nebraska and United States (SEER) (1990-2000)



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nebraska	439.8	454.8	468.1	451.8	448.7	455.2	460.1	470.2	473.5	476.2	465.5
United States	482.5	503.3	511.2	493.7	483.5	476.3	477.6	484.1	484.5	483.1	472.9

TABLE 1
Cancer Incidence (Invasive Cases Only), By Site and Gender
Nebraska (2000 and 1996-2000) and USA (SEER) (2000)

SITE	NEBRASKA 2000						NEBRASKA 1996-2000						U.S. (SEER) 2000		
	MALE		FEMALE		TOTAL		MALE		FEMALE		TOTAL		MALE	FEMALE	TOTAL
	NO.	RATE	NO.	RATE	NO.	RATE	NO.	RATE	NO.	RATE	NO.	RATE	RATE	RATE	RATE
All Sites	4,151	539.0	4,054	419.6	8,206	465.5	20,697	551.3	19,742	416.1	40,440	470.2	560.2	413.8	472.9
Oral Cavity & Pharynx	108	13.9	63	6.4	171	9.7	585	15.5	294	6.1	879	10.3	15.9	6.2	10.6
Esophagus	58	7.5	23	2.0	81	4.5	308	8.2	87	1.6	395	4.6	7.9	2.1	4.7
Stomach	82	10.9	27	2.6	109	6.0	302	8.2	178	3.5	480	5.5	11.6	5.3	8.0
Colon & Rectum (Colorectal)	534	70.1	554	53.7	1,088	60.6	2,675	72.1	2,603	50.9	5,278	60.0	62.5	45.9	53.1
Liver & Intrahepatic Duct	27	3.4	25	2.5	52	3.0	172	4.5	104	2.1	276	3.2	8.1	3.0	5.3
Pancreas	91	11.9	86	8.2	177	9.9	430	11.5	434	8.5	864	9.9	12.8	9.4	10.9
Lung & Bronchus	600	77.8	471	47.9	1,071	60.6	3,265	86.8	2,212	45.9	5,477	63.5	79.8	49.8	62.3
Melanoma of Skin	135	17.2	101	11.1	236	13.6	678	17.8	553	12.7	1,231	14.8	22.5	14.4	17.7
Breast	11	1.5	1,243	132.9	1,254	72.2	42	1.1	6,057	131.8	6,099	72.0	1.3	135.1	73.6
Uterine Cervix	--	--	82	9.5	--	--	--	--	385	9.2	--	--	--	7.6	--

TABLE 1
(Continued)
Cancer Incidence (Invasive Cases Only), By Site and Gender
Nebraska (2000 and 1996-2000) and USA (SEER) (2000)

SITE	NEBRASKA 2000						NEBRASKA 1996-2000						U.S. (SEER) 2000		
	MALE		FEMALE		TOTAL		MALE		FEMALE		TOTAL		MALE	FEMALE	TOTAL
	NO.	RATE	NO.	RATE	NO.	RATE	NO.	RATE	NO.	RATE	NO.	RATE	RATE	RATE	RATE
Uterine Corpus & Unspecified (Endometrium)	--	--	271	29.2	--	--	--	--	1,286	27.8	--	--	--	24.4	--
Ovary	--	--	154	16.3	--	--	--	--	785	17.1	--	--	--	16.3	--
Prostate Gland	1,306	169.6	--	--	--	--	6,197	164.9	--	--	--	--	176.9	--	--
Urinary Bladder	292	38.7	84	7.9	376	20.9	1,322	35.9	429	8.3	1,751	19.9	37.8	9.4	21.3
Brain & CNS	70	8.7	48	5.2	118	6.8	339	8.7	254	5.6	593	7.0	8.0	5.4	6.6
Hodgkin Disease	23	2.8	25	2.9	48	2.8	140	3.5	138	3.2	278	3.3	3.3	2.3	2.7
Non-Hodgkin Lymphoma	172	22.2	182	18.3	354	20.0	864	23.0	846	17.3	1,710	19.8	23.4	15.4	19.0
Multiple Myeloma	46	6.1	46	4.6	92	5.2	248	6.7	212	4.3	460	5.3	6.8	4.5	5.5
Leukemia	127	16.5	104	10.3	232	13.0	593	15.7	517	10.4	1,111	12.7	15.2	9.4	11.9

Total rates are expressed per 100,000 population and are age-adjusted to the 2000 U.S. population
Gender-specific rates are expressed per 100,000 male or female population and are age-adjusted to the 2000 U.S. population.

TABLE 2
Cancer (All Sites) Incidence, by County of Residence
Nebraska and USA (2000 and 1996-2000)

	2000		1996-2000	
	# Cases	Rate	# Cases	Rate
USA (SEER)	NA	472.9	NA	480.4
NEBRASKA	8,206	465.5	40,440	470.2
COUNTY				
ADAMS	158	447.2	794	464.7
ANTELOPE	44	457.7	215	444.3
ARTHUR	*	*	14	402.7
BANNER	*	*	15	286.2
BLAINE	*	*	15	503.6
BOONE	41	469.0	199	460.3
BOX BUTTE	79	594.3	317	493.7
BOYD	12	324.9	66	▼ 305.3
BROWN	22	407.5	114	433.8
BUFFALO	156	415.4	858	482.2
BURT	60	536.6	300	521.9
BUTLER	52	468.0	242	433.0
CASS	96	390.7	531	440.4
CEDAR	52	384.8	251	392.7
CHASE	21	366.0	135	485.8
CHERRY	30	380.0	161	412.5
CHEYENNE	77	656.8	280	471.4
CLAY	37	424.9	214	465.7
COLFAX	56	507.6	292	▼ 378.6
CUMING	54	350.7	249	▼ 345.3
CUSTER	74	447.9	390	464.5
DAKOTA	81	476.4	393	471.6
DAWES	37	391.2	199	438.7
DAWSON	98	389.6	531	408.8
DEUEL	19	557.1	76	496.3
DIXON	29	360.4	156	382.8
DODGE	221	506.6	1,106	510.9
DOUGLAS	2,089	500.9	10,086	▲ 501.8
DUNDY	11	333.6	78	437.0
FILLMORE	47	505.1	213	440.4
FRANKLIN	39	637.0	160	540.5
FRONTIER	17	473.8	81	442.1
FURNAS	36	440.8	190	448.1
GAGE	116	366.4	630	416.1
GARDEN	20	604.6	99	631.6
GARFIELD	16	523.2	74	454.1
GOSPER	14	470.8	64	371.9
GRANT	*	*	15	372.5
GREELEY	22	500.5	105	496.9
HALL	272	480.6	1,279	475.5
HAMILTON	55	518.6	261	473.7
HARLAN	15	286.5	128	465.2
HAYES	*	*	16	269.1
HITCHCOCK	18	390.2	121	520.8
HOLT	92	589.4	372	473.3
HOOKER	13	1009.7	33	594.7
HOWARD	33	408.4	166	394.1

TABLE 2
(Continued)
Cancer (All Sites) Incidence, by County of Residence
Nebraska and USA (2000 and 1996-2000)

	2000		1996-2000	
	# Cases	Rate	# Cases	Rate
COUNTY				
JEFFERSON	48	341.2	262	421.3
JOHNSON	34	492.2	150	415.2
KEARNEY	21	▼242.2	161	402.5
KEITH	52	449.6	258	474.8
KEYA PAHA	*	*	23	354.0
KIMBALL	28	478.7	153	536.9
KNOX	65	447.7	280	390.8
LANCASTER	975	451.8	4,942	480.9
LINCOLN	186	473.5	918	499.2
LOGAN	*	*	17	348.7
LOUP	*	*	13	327.0
McPHERSON	*	*	12	283.2
MADISON	199	529.7	934	517.1
MERRICK	38	357.2	228	456.1
MORRILL	23	346.3	155	461.8
NANCE	26	451.3	138	499.5
NEMAHA	45	461.7	215	454.3
NUCKOLLS	42	452.5	207	466.1
OTOE	83	424.0	422	440.9
PAWNEE	26	426.0	133	452.7
PERKINS	19	431.1	88	428.2
PHELPS	63	512.5	278	455.3
PIERCE	36	362.4	198	397.1
PLATTE	157	473.6	800	▲605.6
POLK	32	406.8	153	385.2
RED WILLOW	71	483.4	341	464.6
RICHARDSON	74	561.4	338	496.8
ROCK	10	416.8	54	448.8
SALINE	80	473.5	401	488.2
SARPY	421	516.4	1,899	462.6
SAUNDERS	106	478.2	469	425.5
SCOTTS BLUFF	207	459.9	1,003	477.1
SEWARD	83	453.1	426	470.9
SHERIDAN	30	344.8	181	402.3
SHERMAN	24	477.4	106	430.8
SIOUX	*	*	14	▼159.6
STANTON	19	268.5	111	378.1
THAYER	40	384.0	238	473.3
THOMAS	*	*	20	547.0
THURSTON	24	356.8	141	414.2
VALLEY	23	321.6	134	382.9
WASHINGTON	84	440.0	433	446.6
WAYNE	42	414.6	175	▼352.3
WEBSTER	28	376.9	135	428.3
WHEELER	7	636.8	29	536.8
YORK	77	432.6	370	420.6

NA = not available
*Number in a given year and rate not shown if based on five or fewer events.
Rates are expressed per 100,000 population and are age-adjusted to the 2000 U.S. population

▼ county rate significantly lower than the state rate

▲ county rate significantly higher than the state rate

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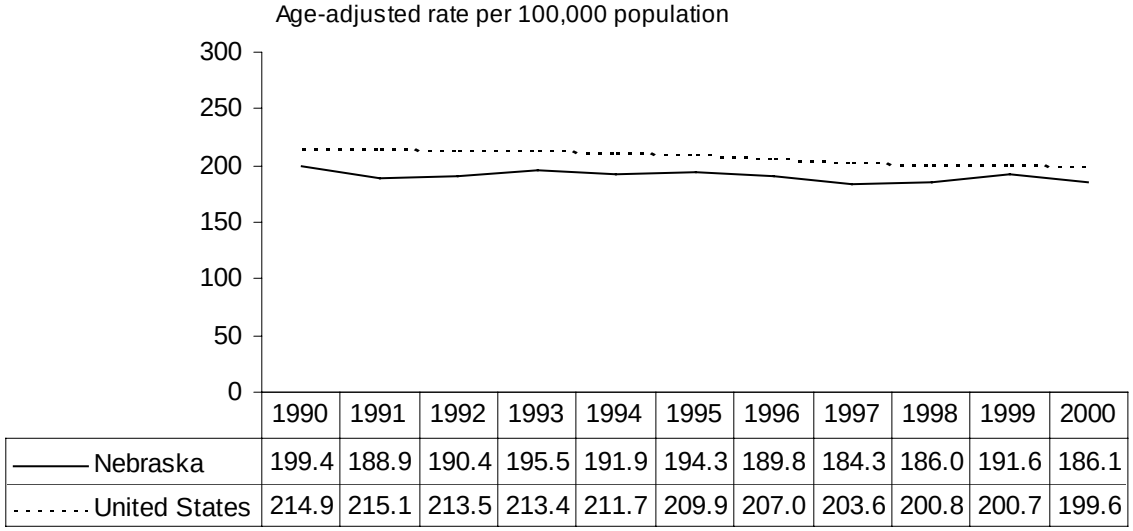
CANCER MORTALITY IN NEBRASKA

In 2000, 3,380 Nebraska residents died from cancer, a number that translates into a rate of 186.1 cancer deaths per 100,000 population. These figures represent a decrease from the state's 1999 figures of 3,409 (cancer deaths) and 191.6 (cancer mortality rate). Cancer was the second leading cause of mortality in Nebraska in 2000, exceeded only by heart disease, and accounted for more than one of every five (22.6%) deaths. By body site, cancers of the lung, breast, prostate, colon and rectum were the most frequently mentioned, accounting for 1,712 (50.7%) of Nebraska's cancer deaths in 2000.

Table 3 presents the number and rate of cancer deaths that occurred among Nebraska residents during 2000 and 1996-2000, for all sites combined and for specific sites. U.S. cancer mortality rates for 2000 are also included. Comparison of state and national rates shows that, for most body sites and for all sites combined, cancer mortality is about the same as or lower in Nebraska than it is in the United States as a whole. Table 4 presents the number of cancer deaths and the mortality rates for 2000 and 1996-2000 by county of residence, with comparable statewide and national rates included. The graph below shows the annual mortality rates for cancer for Nebraska and the United States since 1990.

Cancer (All Sites) Mortality` Rates, By Year
Nebraska and United States (1990-2000)



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nebraska	199.4	188.9	190.4	195.5	191.9	194.3	189.8	184.3	186.0	191.6	186.1
United States	214.9	215.1	213.5	213.4	211.7	209.9	207.0	203.6	200.8	200.7	199.6

TABLE 3
Cancer Mortality, By Site and Gender
Nebraska (2000 and 1996-2000) and USA (2000)

SITE	NEBRASKA 2000						NEBRASKA 1996-2000						U.S. 2000		
	MALE		FEMALE		TOTAL		MALE		FEMALE		TOTAL		MALE	FEMALE	TOTAL
	NO.	RATE	NO.	RATE	NO.	RATE	NO.	RATE	NO.	RATE	NO.	RATE	RATE	RATE	RATE
All Sites	1,731	230.3	1,649	156.6	3,380	186.1	8,603	233.8	8,011	156.9	16,614	187.9	249.8	167.3	199.6
Oral Cavity & Pharynx	25	3.3	17	1.6	42	2.3	112	3.0	66	1.3	178	2.0	4.1	1.6	2.7
Esophagus	76	10.1	18	1.6	94	5.2	289	7.7	70	1.3	359	4.1	7.7	1.8	4.4
Stomach	30	4.0	27	2.4	57	3.1	175	4.7	128	2.4	303	3.4	6.4	3.2	4.6
Colon & Rectum (Colorectal)	208	27.7	204	18.1	412	22.3	1,015	27.8	1,000	18.5	2,015	22.4	25.2	17.6	20.8
Liver & Intrahepatic Duct	19	2.5	26	2.6	45	2.6	159	4.2	116	2.3	275	3.2	6.8	2.9	4.7
Pancreas	93	12.2	105	9.9	198	10.9	424	11.5	433	8.3	857	9.7	12.2	9.3	10.6
Lung & Bronchus	499	65.4	361	35.1	860	48.0	2,705	72.5	1,686	34.2	4,391	50.5	76.9	41.2	56.1
Melanoma of Skin	28	3.6	16	1.6	44	2.5	156	4.2	77	1.6	233	2.7	3.8	1.8	2.7
Breast	3	0.4	226	22.2	229	12.7	9	0.2	1,290	25.9	1,299	14.8	0.4	26.7	15.3
Uterine Cervix	--	--	17	1.9	--	--	--	--	112	2.5	--	--	--	2.8	--

TABLE 3
(Continued)
Cancer Mortality, By Site and Gender
Nebraska (2000 and 1996-2000) and USA (2000)

SITE	NEBRASKA 2000						NEBRASKA 1996-2000						U.S. 2000		
	MALE		FEMALE		TOTAL		MALE		FEMALE		TOTAL		MALE	FEMALE	TOTAL
	NO.	RATE	NO.	RATE	NO.	RATE	NO.	RATE	NO.	RATE	NO.	RATE	RATE	RATE	RATE
Uterine Corpus & Unspecified (Endometrium)	--	--	53	5.1	--	--	--	--	170	3.3	--	--	--	4.1	--
Ovary	--	--	93	9.3	--	--	--	--	434	8.6	--	--	--	8.9	--
Prostate Gland	211	29.8	--	--	--	--	990	28.3	--	--	--	--	30.6	--	--
Urinary Bladder	46	6.3	21	1.8	67	3.6	233	6.5	111	1.9	344	3.8	7.6	2.3	4.3
Brain & CNS	55	7.0	46	4.8	101	5.8	243	6.4	209	4.5	452	5.3	5.6	3.7	4.5
Hodgkin Disease	3	0.4	4	0.4	7	0.4	28	0.7	26	0.5	54	0.6	0.6	0.4	0.5
Non-Hodgkin Lymphoma	80	10.7	87	7.8	167	9.1	396	10.9	403	7.5	799	8.9	10.3	6.7	8.2
Multiple Myeloma	38	5.2	32	2.9	70	3.8	169	4.6	155	3.0	324	3.7	4.7	3.3	3.8
Leukemia	81	10.8	78	7.0	159	8.6	370	10.1	344	6.5	714	8.0	10.3	5.9	7.7

Total rates are expressed per 100,000 population and are age-adjusted to the 2000 U.S. population
Gender-specific rates are expressed per 100,000 male or female population and are age-adjusted to the 2000 U.S. population.

TABLE 4
Cancer (All Sites) Mortality, by County of Residence
Nebraska and USA (2000 and 1996-2000)

	2000		1996-2000	
	# Deaths	Rate	# Deaths	Rate
USA (SEER)	NA	199.6	NA	202.3
NEBRASKA	3,380	186.1	16,614	187.9
COUNTY				
ADAMS	56	149.3	339	188.0
ANTELOPE	24	224.8	104	196.0
ARTHUR	-	-	7	229.8
BANNER	-	-	4	**
BLAINE	*	*	10	305.1
BOONE	15	161.5	79	152.2
BOX BUTTE	38	279.4	139	208.1
BOYD	*	*	33	146.1
BROWN	14	233.8	50	166.2
BUFFALO	68	181.9	310	172.1
BURT	25	198.9	127	198.3
BUTLER	29	247.7	114	190.6
CASS	48	197.1	230	192.3
CEDAR	17	121.1	89	▼122.6
CHASE	12	173.1	55	194.4
CHERRY	20	248.0	74	176.7
CHEYENNE	35	273.3	113	173.7
CLAY	19	202.9	91	189.0
COLFAX	19	156.5	99	112.6
CUMING	28	175.0	126	170.5
CUSTER	30	167.1	143	159.6
DAKOTA	44	264.5	176	213.3
DAWES	17	156.3	100	200.9
DAWSON	52	197.8	247	187.3
DEUEL	*	*	30	167.0
DIXON	17	211.6	64	138.6
DODGE	87	181.2	438	189.5
DOUGLAS	823	200.5	4,125	▲208.2
DUNDY	6	185.5	35	194.1
FILLMORE	24	253.8	87	165.4
FRANKLIN	19	325.5	64	192.8
FRONTIER	8	203.9	33	167.7
FURNAS	15	145.8	86	172.5
GAGE	68	196.5	321	195.7
GARDEN	7	164.9	37	195.6
GARFIELD	*	*	36	215.7
GOSPER	8	245.8	21	119.9
GRANT	-	-	5	**
GREELEY	7	146.5	37	165.0
HALL	116	198.1	537	193.5
HAMILTON	28	234.1	108	182.9
HARLAN	*	*	57	188.0
HAYES	*	*	14	235.2
HITCHCOCK	10	218.6	53	212.0
HOLT	31	177.0	147	174.3
HOOKER	*	*	7	98.1
HOWARD	19	218.8	74	166.4

TABLE 4
(Continued)
Cancer (All Sites) Mortality, by County of Residence
Nebraska and USA (2000 and 1996-2000)

	2000		1996-2000	
	# Deaths	Rate	# Deaths	Rate
COUNTY				
JEFFERSON	32	216.7	130	196.7
JOHNSON	11	126.0	75	191.8
KEARNEY	16	181.2	83	205.1
KEITH	27	224.2	103	181.9
KEYA PAHA	*	*	13	181.0
KIMBALL	10	154.1	50	173.1
KNOX	25	146.1	121	145.7
LANCASTER	408	192.8	1,949	190.5
LINCOLN	71	175.4	372	195.5
LOGAN	*	*	5	**
LOUP	*	*	11	241.3
McPHERSON	-	-	4	**
MADISON	69	166.9	358	189.4
MERRICK	10	▼81.3	92	164.8
MORRILL	8	117.1	63	178.5
NANCE	6	104.3	49	176.2
NEMAHA	14	121.8	104	207.0
NUCKOLLS	21	233.9	109	227.9
OTOE	33	158.1	202	193.7
PAWNEE	9	130.2	51	163.4
PERKINS	11	254.8	49	228.1
PHELPS	24	173.4	115	173.0
PIERCE	13	131.4	79	154.1
PLATTE	59	170.4	295	228.3
POLK	12	147.4	74	170.7
RED WILLOW	39	240.7	158	203.7
RICHARDSON	35	216.2	149	198.8
ROCK	8	251.8	24	175.3
SALINE	34	199.3	149	168.5
SARPY	136	186.4	654	175.7
SAUNDERS	27	115.3	200	170.3
SCOTTS BLUFF	81	171.4	389	175.9
SEWARD	29	149.5	171	178.5
SHERIDAN	13	132.9	84	171.2
SHERMAN	6	98.8	49	179.5
SIOUX	*	*	16	177.9
STANTON	10	151.9	46	154.6
THAYER	21	192.0	90	161.7
THOMAS	*	*	9	270.4
THURSTON	6	92.9	63	177.8
VALLEY	8	91.1	66	160.3
WASHINGTON	53	274.1	201	204.2
WAYNE	13	125.1	63	▼121.6
WEBSTER	8	87.2	52	140.0
WHEELER	*	*	13	249.3
YORK	29	152.4	137	146.1

NA = not available
*Number in a given year and rate not shown if based on five or fewer events.
**Rate for combined years not shown if based on five or fewer events.
Rates are expressed per 100,000 population and are age-adjusted to the 2000 U.S. population

▼ county rate significantly lower than the state rate

▲ county rate significantly higher than the state rate

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INCIDENCE AND MORTALITY FOR SELECTED SITES

Lung

Although lung cancer was only the fourth most frequently diagnosed cancer among Nebraska residents in 2000, it was the year's leading cause of cancer mortality, accounting for more than 25% of the state's cancer deaths. Long the leading cause of cancer deaths among Nebraska men, lung cancer overtook breast cancer in 1993 to become the leading cause of cancer deaths among Nebraska women as well. In recent years, lung cancer has averaged nearly 1,100 diagnoses and more than 850 deaths in Nebraska per year.

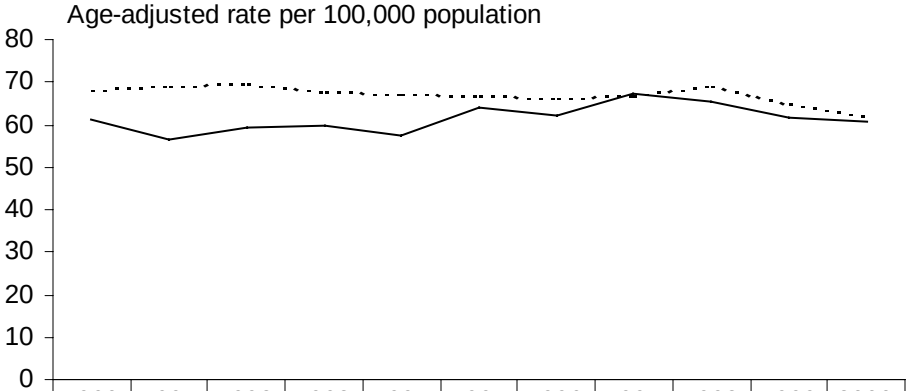
Cigarette smoking is the major cause of lung cancer and is estimated to cause 85% of lung cancer deaths. People who smoke two or more packs of cigarettes per day are 15 to 25 times more likely to die from lung cancer than non-smokers. Quitting smoking reduces the risk of dying from lung cancer, although it takes 10-15 years for an ex-smoker's risk to drop to the level of a lifelong non-smoker.

Despite its heavy toll in human lives, both lung cancer incidence and mortality remain lower in Nebraska than in the United States as a whole. In fact, Nebraska's lung cancer mortality rate has been consistently lower than the U.S. rate for several decades. This is undoubtedly attributable to Nebraska's traditionally low smoking prevalence rate, although in recent years the difference between smoking rates in Nebraska and the rest of the nation has almost completely disappeared.

Lung cancer incidence and mortality statistics by county of residence are presented in Appendix I (Table 5).

Lung Cancer Incidence Rates, By Year

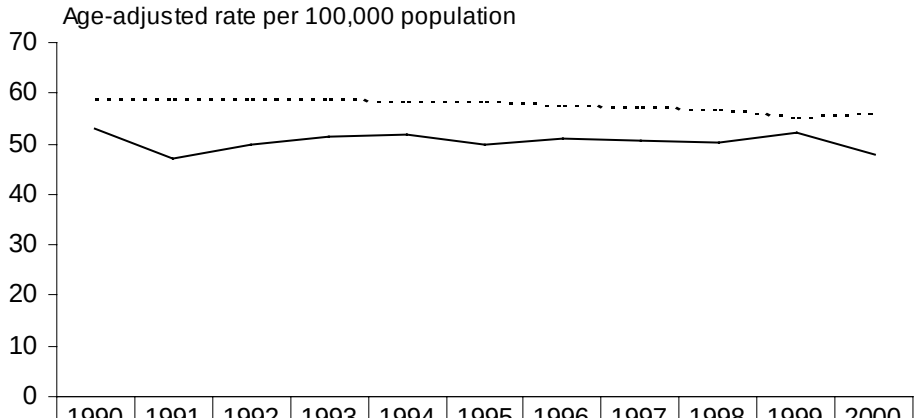
Nebraska and United States (SEER) (1990-2000)



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nebraska	61.2	56.4	59.4	59.6	57.6	64.0	62.3	67.2	65.4	61.5	60.6
United States	68.2	69.4	69.6	67.9	67.3	66.9	66.4	66.6	69.3	65.0	62.3

Lung Cancer Mortality Rates, By Year

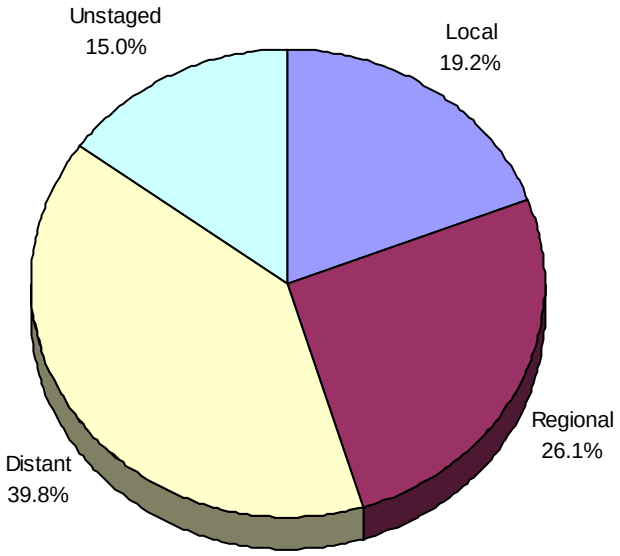
Nebraska and United States (1990-2000)



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nebraska	52.9	47.2	49.9	51.4	52.0	50.0	51.0	50.6	50.1	52.1	48.0
United States	58.9	59.0	58.9	59.1	58.5	58.4	57.9	57.5	57.1	55.4	56.1

Lung Cancer Incidence % of Cases, By Stage of Disease at Diagnosis

Nebraska (1996-2000)



Breast (Female only)

Cancer of the breast is the most common malignancy diagnosed among women and the second most frequent cause of female cancer deaths. In Nebraska, more than 6,000 women were diagnosed with invasive breast cancer and nearly 1,300 women died from it between 1996 and 2000. Since 1990, the rate of breast cancer deaths has declined substantially (by over 30% in Nebraska and about 20% nationally), while at the same time, the rate of breast cancer diagnoses has increased. This trend is probably due to increased use of mammography and clinical breast examination (CBE) for breast cancer screening. As more women are screened, more tumors are found, but because they are more likely to be early-stage tumors, they are more treatable and less likely to result in death.

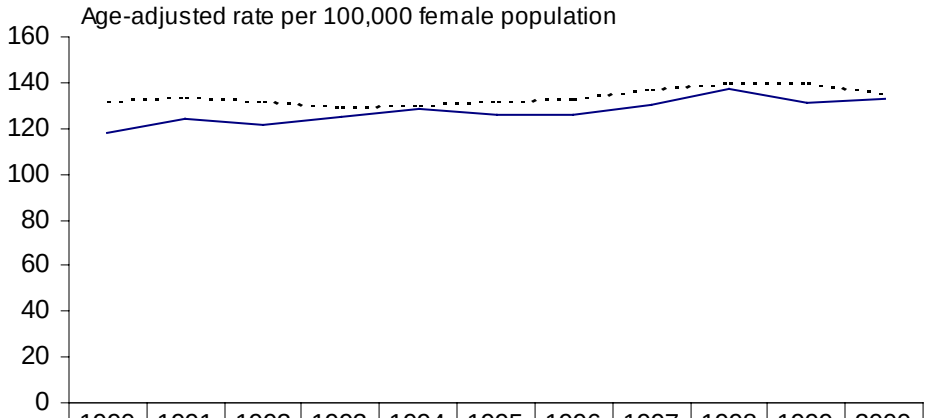
Age is one of the strongest risk factors for breast cancer. In Nebraska, fewer than one of every five cases diagnosed during 1996-2000 involved a woman under the age of 50, while more than half occurred among women 65 and older. Other risk factors include a personal or family history of breast cancer, some forms of benign breast disease, early menstruation, late menopause, never having children or having a first child after age 30, and for post-menopausal women, obesity.

To date, knowledge about the risk factors for breast cancer has not translated into practical ways to prevent it from occurring. Screening is the only proven method for saving lives that the disease might otherwise claim. The American Cancer Society (ACS) recommends that, for women of average risk, annual mammograms begin at age 40 and continue as long as no serious or chronic health problems are present. The ACS also recommends that CBE be part of a regular physical check-up, about every three years for women 20-39, and annually for women 40 and older. Women who have an increased risk of breast cancer may, after consulting with a physician, want to begin screening earlier and/or have a breast ultrasound or MRI (magnetic resonance imaging) in addition to a regular mammogram.

Female breast cancer incidence and mortality statistics by county of residence are presented in Appendix II (Table 6).

Female Breast Cancer Incidence Rates, By Year

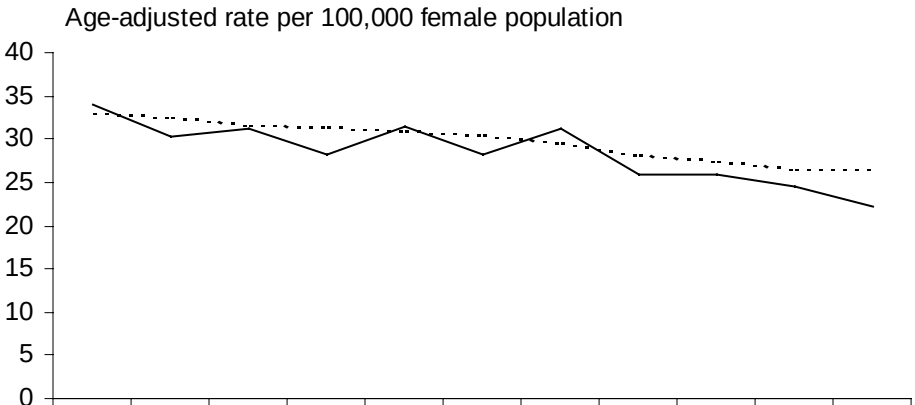
Nebraska and United States (SEER) (1990-2000)



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nebraska	118.0	124.4	121.8	124.8	128.6	126.1	126.3	129.9	137.2	131.4	132.9
United States	131.6	133.5	131.8	129.0	130.6	132.2	133.2	137.1	140.3	139.6	135.1

Female Breast Cancer Mortality Rates, By Year

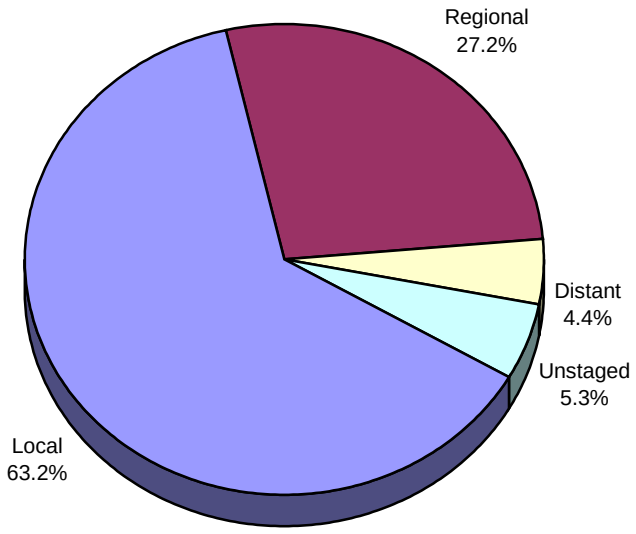
Nebraska and United States (1990-2000)



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nebraska	34.1	30.3	31.1	28.2	31.5	28.3	31.1	26.0	25.9	24.5	22.2
United States	33.1	32.7	31.6	31.4	30.9	30.6	29.5	28.2	27.5	26.6	26.7

Female Breast Cancer Incidence % of Cases, By Stage of Disease at Diagnosis

Nebraska (1996-2000)



Colorectal (Colon and Rectum)

In 2000, colorectal cancer was the third most frequently diagnosed cancer among Nebraska residents, accounting for nearly 1,100 new cases. It was also the second leading cause of cancer mortality in the state, accounting for over 400 deaths.

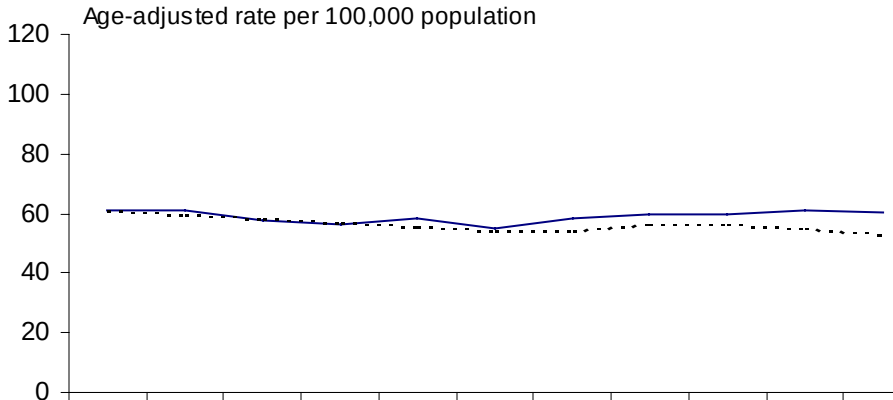
The risk of developing colorectal cancer increases with age. In Nebraska, over 70% of the colorectal cancer cases that occurred during 1996-2000 were 65 years of age or older at the time of diagnosis. Other risk factors include a personal or family history of colorectal cancer or polyps, a personal history of chronic inflammatory bowel disease, and certain hereditary colorectal cancer syndromes. Modifiable risk factors include physical inactivity, obesity, smoking, red meat consumption, and having more than one alcoholic drink per day.

At present, screening for asymptomatic polyps and tumors remains the best method for preventing colorectal cancer cases and deaths. The American Cancer Society recommends that, for people of average risk, screening begin at age 50 and follow one of these schedules: 1) a fecal occult blood test every year, 2) flexible sigmoidoscopy every five years, 3) a fecal occult blood test every year and flexible sigmoidoscopy every five years (preferable to either test alone), 4) double-contrast barium enema every five years, or 5) colonoscopy every ten years. People at high risk (i.e., a personal or family history of colorectal cancer or polyps, a personal history of chronic inflammatory bowel disease, or a family history of hereditary colorectal cancer syndromes) should begin screening before age 50 and/or be screened at shorter intervals.

Colorectal cancer incidence and mortality statistics by county of residence are presented in Appendix III (Table 7).

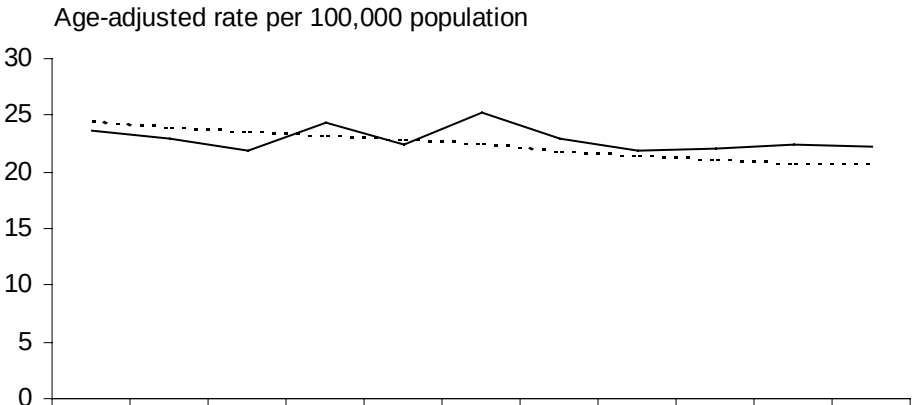
Colorectal Cancer Incidence Rates, By Year

Nebraska and United States (SEER) (1990-2000)



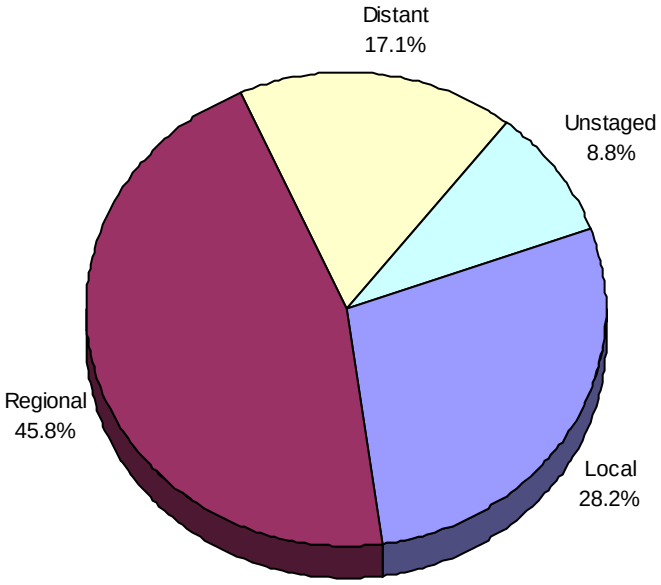
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nebraska	61.0	61.2	57.6	56.2	58.6	54.8	58.4	59.7	59.6	61.2	60.6
United States	60.7	59.5	58.0	56.8	55.7	54.0	54.6	56.3	56.5	54.9	53.1

Colorectal Cancer Mortality
Rates, By Year
Nebraska and United States (1990-2000)



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nebraska	23.6	23.0	21.9	24.4	22.4	25.3	23.0	21.9	22.0	22.4	22.3
United States	24.6	24.0	23.6	23.3	22.9	22.6	21.9	21.5	21.2	20.9	20.8

Colorectal Cancer Incidence
% of Cases, By Stage of Disease at Diagnosis
Nebraska (1996-2000)



Prostate

With over 1,300 diagnoses in 2000, prostate cancer was the most common cancer among Nebraska men, accounting for about one of every three new cancer cases. Although survival rates are quite high (nearly 90% of all prostate cancer patients are alive five years after diagnosis, according to national data), it is also the third leading cause of male cancer deaths, and was responsible for nearly 1,000 deaths among Nebraska men between 1996 and 2000.

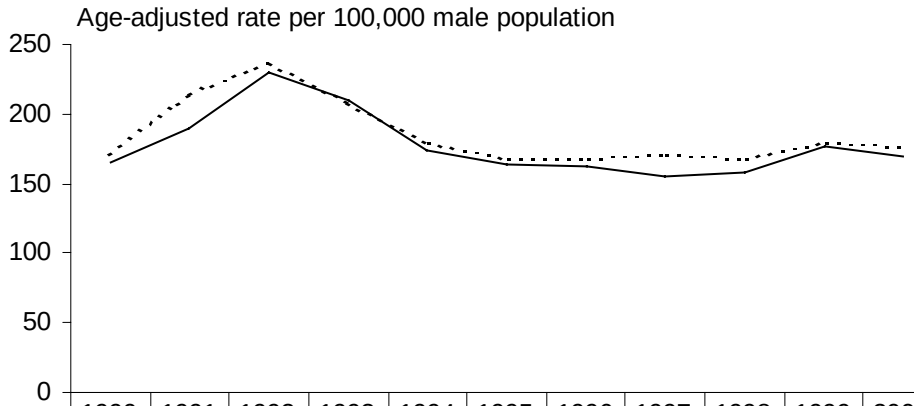
Little is known about the risk factors for prostate cancer. However, there are two well-known high-risk groups: the elderly (men 65 and older accounted for over 70% of Nebraska diagnoses during 1996-2000) and African-Americans. There also is some evidence that family history of the disease, dietary fat consumption, and occupational exposure to cadmium may each increase the risk of prostate cancer.

Although screening can reduce mortality for some types of cancer (e.g., breast, cervical, colorectal), screening for prostate cancer remains controversial, with many scientists maintaining that its effectiveness is still unproven. The American Cancer Society recommends that health care providers offer the prostate-specific antigen test and a digital rectal exam annually to men age 50 and older who have at least a 10-year life expectancy. Men at higher risk (African-Americans and those who have a first-degree relative diagnosed with prostate cancer at a young age) should begin testing at age 45. Patients should be given information about the benefits and limitations of testing so that they can make an informed decision.

Prostate cancer incidence and mortality statistics by county of residence are presented in Appendix IV (Table 8).

Prostate Cancer Incidence Rates, By Year

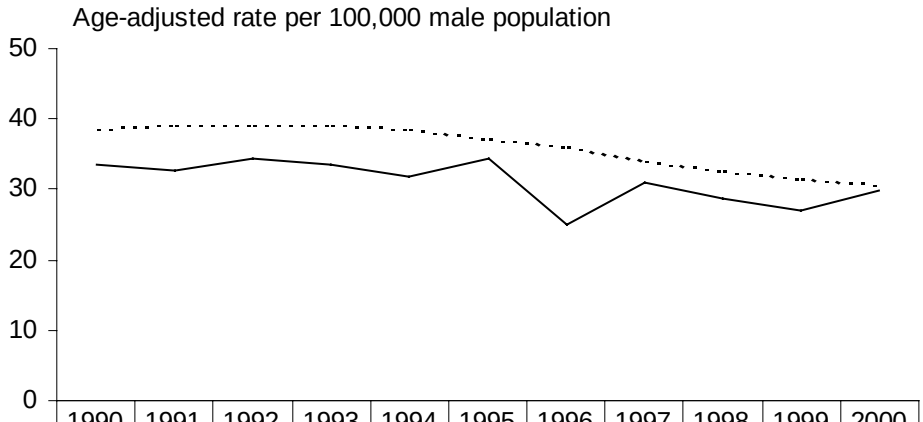
Nebraska and United States (SEER) (1990-2000)



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nebraska	165.4	189.9	229.3	209.5	173.4	163.2	162.7	155.7	158.0	177.0	169.6
United States	170.4	214.4	236.8	208.8	179.6	168.1	167.7	171.5	168.2	179.4	176.9

Prostate Cancer Mortality Rates, By Year

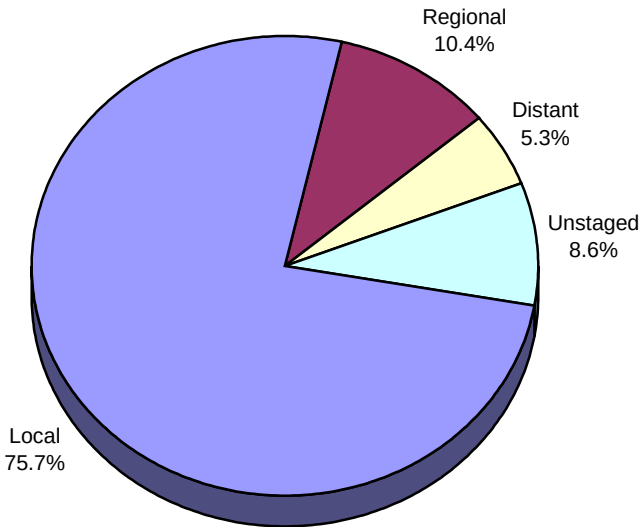
Nebraska and United States (1990-2000)



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nebraska	33.5	32.8	34.5	33.5	31.9	34.4	25.1	31.0	28.8	26.9	29.8
United States	38.6	39.3	39.2	39.3	38.5	37.3	36.0	34.1	32.6	31.6	30.6

Prostate Cancer Incidence % of Cases, By Stage of Disease at Diagnosis

Nebraska (1996-2000)



Urinary Bladder

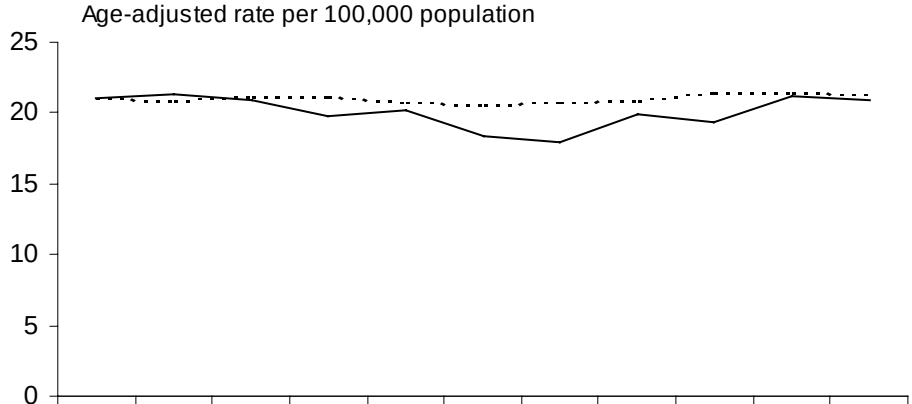
Between 1996 and 2000, more than 1,700 Nebraska residents were diagnosed with bladder cancer. Bladder cancer occurs far more frequently among men than women (by about a 3:1 ratio), and now ranks fourth as the most common site of cancer diagnoses among Nebraska men. However, deaths from the disease are much less frequent (344 Nebraska residents died from it during 1996-2000), which is the result of a high percentage of early-stage diagnoses and the existence of effective treatments. Survival prospects have improved considerably in recent decades, to the point where the most current national data show that over 80% of all bladder cancer patients are still alive five years after diagnosis.

Cigarette smoking is the most important known risk factor for bladder cancer. Smokers develop bladder cancer two to three times more often than non-smokers, and estimates suggest that about one-third of all cases are attributable to smoking. Occupational exposures to certain substances used in the manufacture of dyes (benzidine and 2-naphthylamine) also increase the risk of bladder cancer, as does employment in the rubber and leather industries.

Urinary bladder cancer incidence and mortality statistics by county of residence are presented in Appendix V (Table 9).

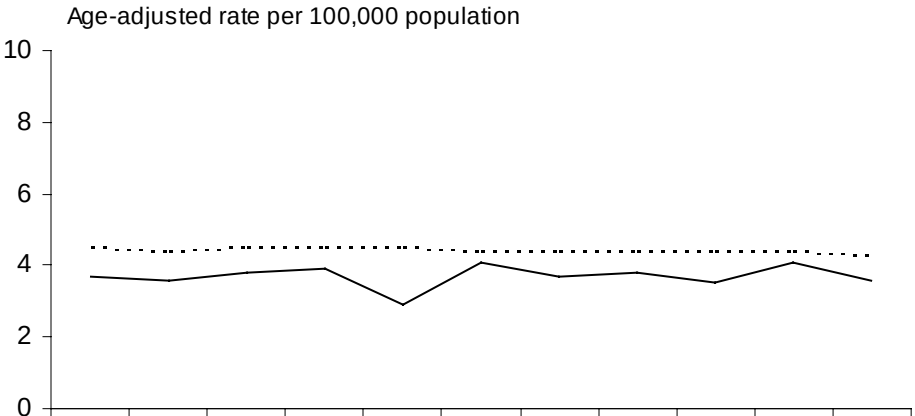
Bladder Cancer Incidence Rates, By Year

Nebraska and United States (SEER) (1990-2000)



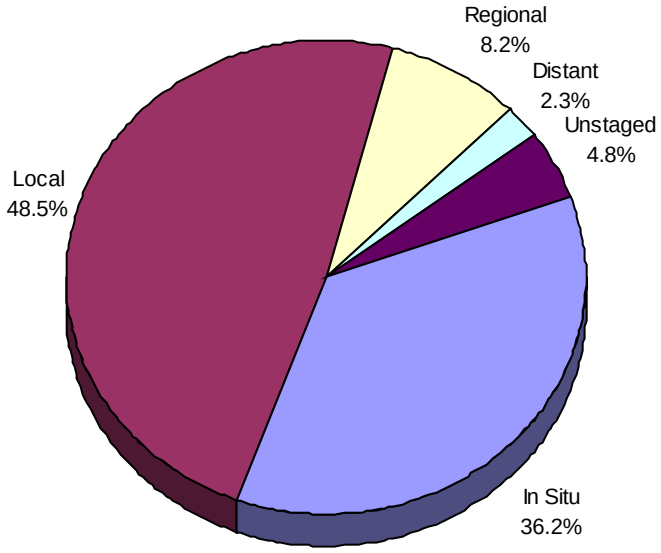
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nebraska	21.0	21.3	20.9	19.8	20.2	18.4	18.0	19.9	19.4	21.2	20.9
United States	21.1	20.9	21.2	21.2	20.8	20.6	20.7	20.9	21.4	21.5	21.3

Bladder Cancer Mortality
Rates, By Year
Nebraska and United States (1990-2000)



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nebraska	3.7	3.6	3.8	3.9	2.9	4.1	3.7	3.8	3.5	4.1	3.6
United States	4.5	4.4	4.5	4.5	4.5	4.4	4.4	4.4	4.4	4.4	4.3

Bladder Cancer Incidence
% of Cases, By Stage of Disease at Diagnosis
Nebraska (1996-2000)



Non-Hodgkin Lymphoma

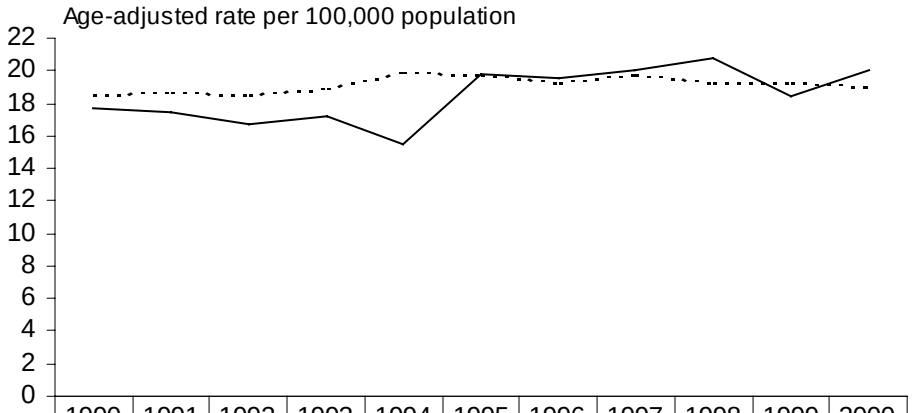
Lymphomas are cancers that affect the white blood cells of the immune system, and are usually classified as either Hodgkin Disease or non-Hodgkin lymphoma. Non-Hodgkin lymphoma is by far the more common disorder of the two, accounting for over 1,700 diagnoses and nearly 800 deaths among Nebraska residents between 1996 and 2000. Incidence is tied closely to age, with more than six of every ten Nebraska cases diagnosed among people 65 years of age and older. National statistics indicate that the incidence rate for non-Hodgkin lymphoma has increased by about 80% since the mid-1970s, and some of this increase is related to the appearance of AIDS. However, both state and national data show that non-Hodgkin lymphoma deaths have been increasing since at least 1950, which indicates that factors other than AIDS are also responsible.

The causes of non-Hodgkin lymphoma are unknown, although there is evidence that viral exposures and reduced immune function are associated with the disease. People whose immune systems have been suppressed by drugs, particularly those who have received an organ transplant, have an extremely high risk of non-Hodgkin lymphoma, and it also occurs more frequently among people with congenital and acquired immunologic disorders, including AIDS. The increased incidence of the disease among people with congenital disorders of the immune system suggests that hereditary influences may also be a risk factor. Some studies have found that occupational exposure to certain herbicides is a risk factor as well.

Non-Hodgkin lymphoma incidence and mortality statistics are presented in Appendix VI (Table 10).

Non-Hodgkin Lymphoma Incidence Rates, By Year

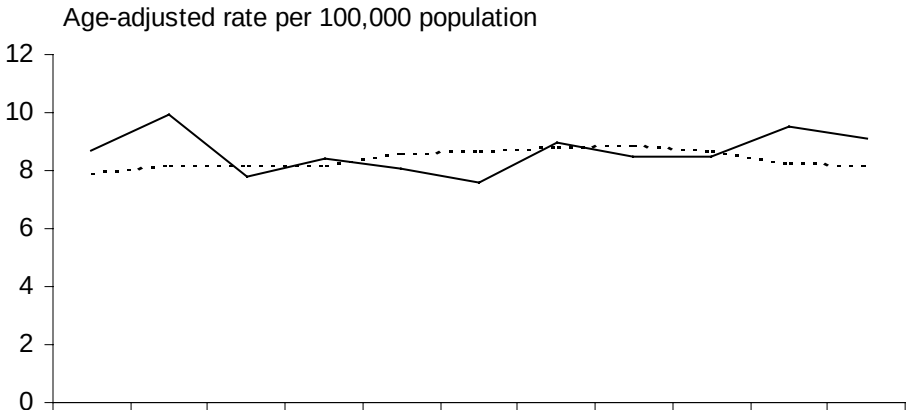
Nebraska and United States (SEER) (1990-2000)



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nebraska	17.7	17.5	16.7	17.2	15.5	19.8	19.6	20.0	20.8	18.4	20.0
United States	18.5	18.7	18.6	18.9	19.9	19.8	19.3	19.8	19.3	19.3	19.0

Non-Hodgkin Lymphoma Mortality Rates, By Year

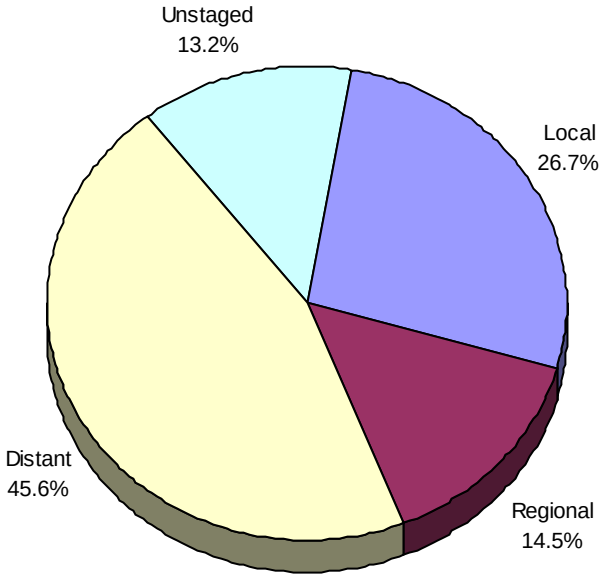
Nebraska and United States (1990-2000)



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nebraska	8.7	9.9	7.8	8.4	8.1	7.6	9.0	8.5	8.5	9.5	9.1
United States	7.9	8.2	8.2	8.2	8.6	8.7	8.8	8.9	8.7	8.3	8.2

Non-Hodgkin Lymphoma Incidence % of Cases, By Stage of Disease at Diagnosis

Nebraska (1996-2000)



Leukemia

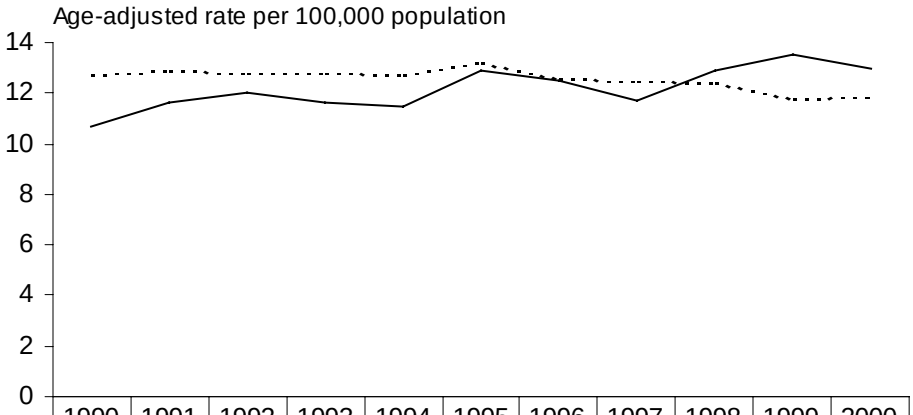
Between 1996 and 2000, leukemia accounted for more than 1,100 diagnoses and over 700 deaths among Nebraska residents. Although it is sometimes thought of as a children's disease, data from the NCR show that this is not strictly true. In fact, about six of every ten leukemia cases that occurred in Nebraska between 1996 and 2000 were 65 years of age or older at diagnosis. At the same time, however, leukemia was also the state's most common type of childhood cancer, accounting for about one-quarter of all cancers diagnosed among Nebraska residents under the age of 15. By type, acute lymphocytic leukemia was the most frequently diagnosed among children, while acute myeloid and chronic lymphocytic were the most common types among adults.

The major causes of most types of leukemia are unknown. Nevertheless, several risk factors have been identified, and include genetic abnormalities (such as Down's syndrome), exposure to ionizing radiation, and workplace exposure to benzene and other related solvents. Adult T-cell leukemia is strongly associated with infection by a retrovirus, HTLV-I (human T-lymphotropic virus, type I). Some evidence also suggests that cigarette smoking is a risk factor for certain types of leukemia.

Leukemia incidence and mortality statistics by county of residence are presented in Appendix VII (Table 11).

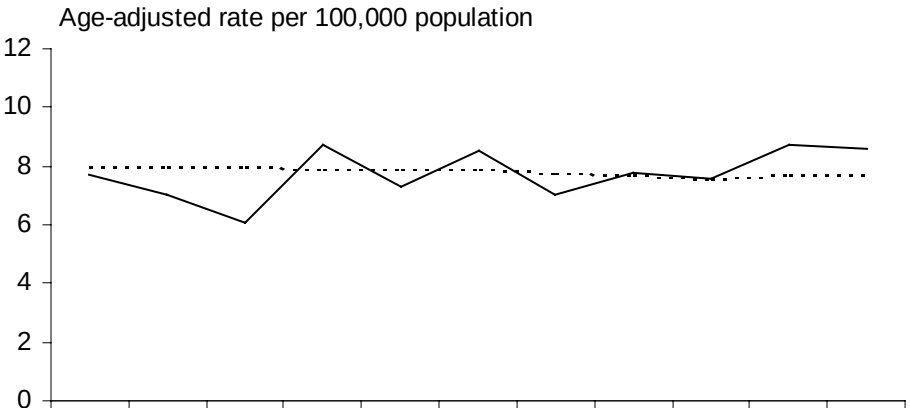
Leukemia Incidence Rates, By Year

Nebraska and United States (SEER) (1990-2000)



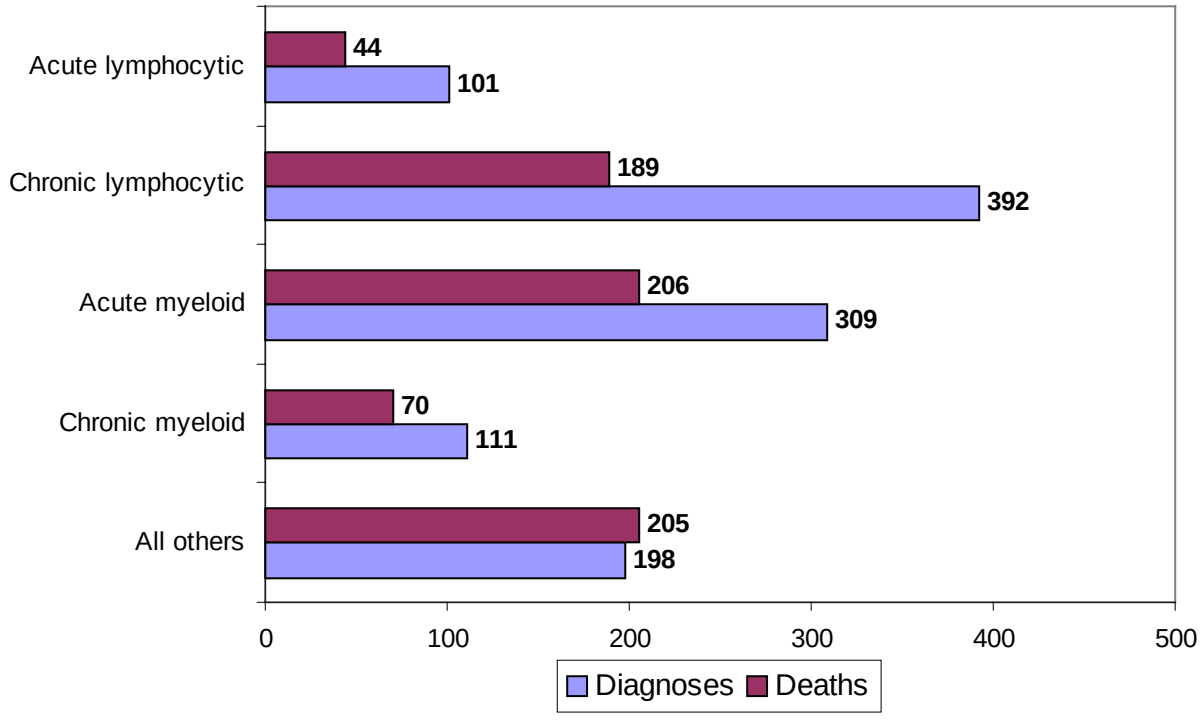
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nebraska	10.7	11.6	12.0	11.6	11.5	12.9	12.5	11.7	12.9	13.5	13.0
United States	12.7	12.9	12.8	12.8	12.7	13.2	12.6	12.5	12.4	11.8	11.9

Leukemia Mortality
Rates, By Year
Nebraska and United States (1990-2000)



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nebraska	7.7	7.0	6.1	8.7	7.3	8.5	7.0	7.8	7.6	8.7	8.6
United States	8.0	8.0	8.0	7.9	7.9	7.9	7.8	7.7	7.6	7.7	7.7

Number of Leukemia Diagnoses and Deaths, By Histologic Type
Nebraska, 1996 – 2000



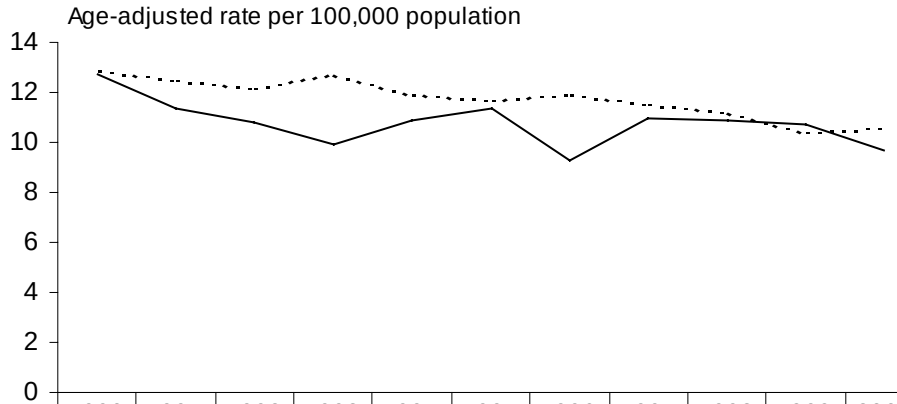
Oral Cavity and Pharynx

Cancers of the oral cavity and pharynx (i.e., mouth and throat) accounted for close to 900 diagnoses and nearly 200 deaths among Nebraska residents between 1996 and 2000. The incidence of these cancers increases with age, with slightly more than half of all cases diagnosed at age 65 or older, and they occur more than twice as often among men than women. Since 1990, the rates of diagnosis and death from cancers of the oral cavity and pharynx have decreased by about 20%, both in Nebraska and throughout the United States.

Tobacco use in all its forms--smoking, chewing, and dipping--is the major risk factor for cancers of the oral cavity and pharynx. These cancers most often develop at the site directly exposed to tobacco, with cancers of the gum and cheek developing most frequently among snuff-dippers; cancer of the throat developing most frequently among cigarette smokers; and cancer of the lip developing most frequently among pipe-smokers. Alcohol is also a known risk factor for cancers of the oral cavity and pharynx, with the risk especially high for those who both smoke and drink.

Oral cavity and pharynx cancer incidence and mortality statistics by county of residence are presented in Appendix VIII (Table 12).

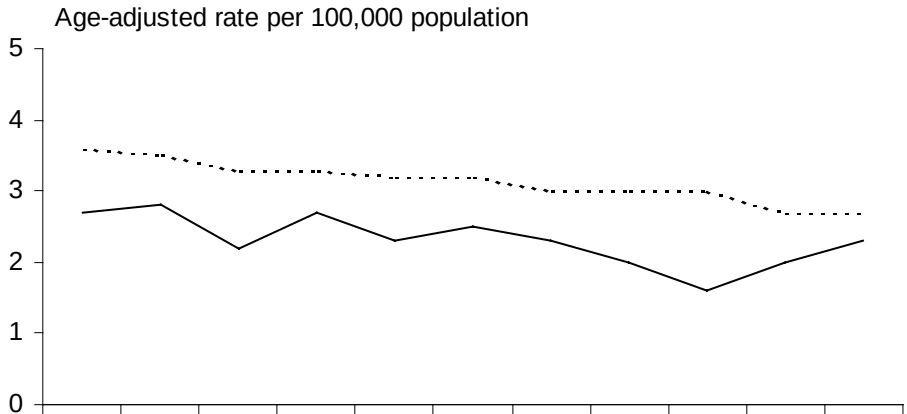
Oral Cavity & Pharynx Cancer Incidence Rates, By Year.
Nebraska and United States (SEER) (1990-2000)



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nebraska	12.7	11.4	10.8	9.9	10.9	11.4	9.3	11.0	10.9	10.7	9.7
United States	12.9	12.5	12.2	12.7	11.9	11.7	11.9	11.5	11.2	10.4	10.6

Oral Cavity & Pharynx Cancer Mortality Rates, By Year

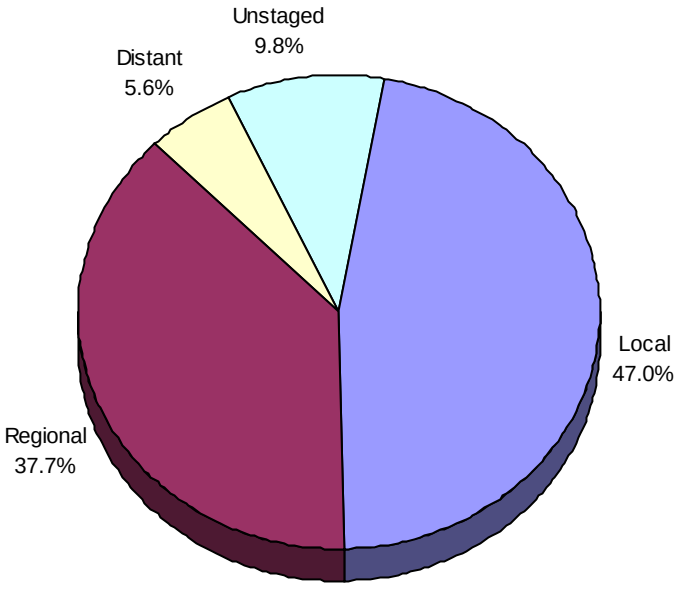
Nebraska and United States (1990-2000)



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nebraska	2.7	2.8	2.2	2.7	2.3	2.5	2.3	2.0	1.6	2.0	2.3
United States	3.6	3.5	3.3	3.3	3.2	3.2	3.0	3.0	3.0	2.7	2.7

Oral Cavity & Pharynx Cancer Incidence % of Cases, By Stage of Disease at Diagnosis

Nebraska (1996-2000)



Melanoma of the Skin

There are several different types of skin cancer, but melanomas are the most serious. Nationally, melanomas comprise only about 5% of all skin cancer diagnoses but about 75% of all skin cancer deaths. In Nebraska, melanomas of the skin accounted for more than 1,200 diagnoses and 200 deaths between 1996 and 2000. Increasing numbers of melanoma diagnoses and deaths have occurred both statewide and nationally in recent decades.

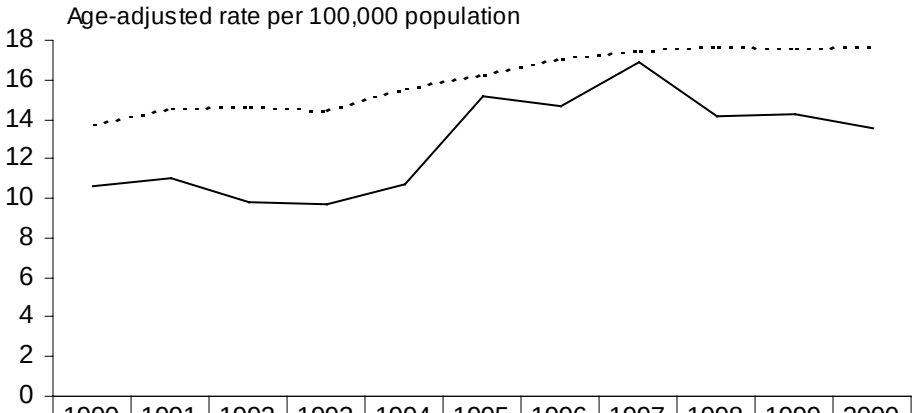
Melanoma is related to exposure to ultraviolet radiation (most of which comes from the sun), particularly exposures during childhood that resulted in severe sunburns. The risk of developing melanoma is particularly high among people with light skin. Sun exposure is not the only risk factor, however: family history of melanoma and the presence of dysplastic nevi (large moles with irregular coloration and shape) also carry some increased risk.

Skin melanomas are among the most preventable and treatable of all cancers. Wearing protective clothing and using sunscreen are the best methods for preventing the disease, and children in particular should have such protection. In addition, early detection can greatly reduce the risk of melanoma mortality. Recognition of changes in skin growths or the appearance of new growths is the best way to find melanomas early in their development. The American Cancer Society suggests that adults practice skin self-examination regularly, and that suspicious lesions be evaluated promptly by a physician.

Melanoma of the skin incidence and mortality statistics by county of residence are presented in Appendix IX (Table 13).

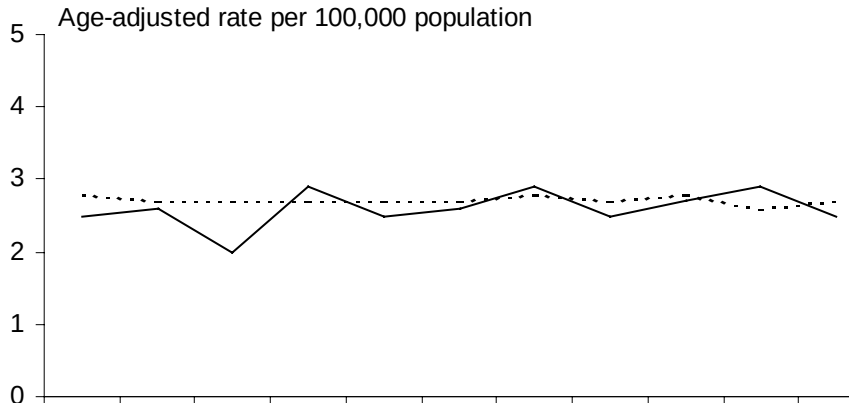
Melanoma of Skin Incidence Rates, By Year

Nebraska and United States (SEER) (1990-2000)



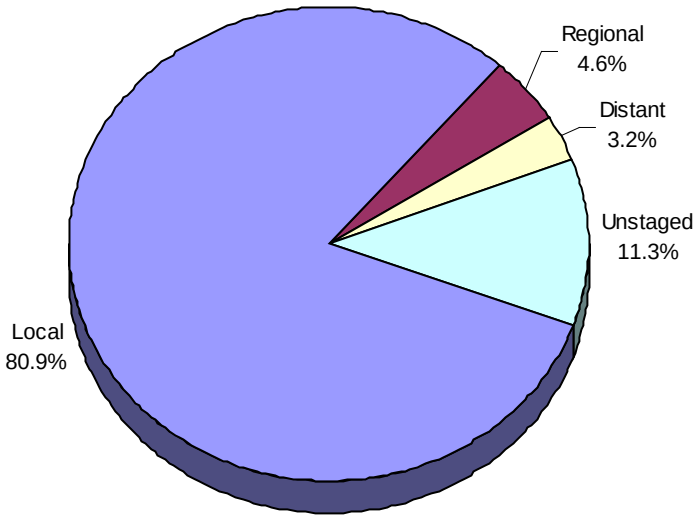
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nebraska	10.6	11.0	9.8	9.7	10.7	15.2	14.7	16.9	14.2	14.3	13.6
United States	13.8	14.6	14.7	14.5	15.6	16.3	17.1	17.5	17.7	17.6	17.7

Melanoma of Skin Mortality
Rates, By Year
Nebraska and United States (1990-2000)



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nebraska	2.5	2.6	2.0	2.9	2.5	2.6	2.9	2.5	2.7	2.9	2.5
United States	2.8	2.7	2.7	2.7	2.7	2.7	2.8	2.7	2.8	2.6	2.7

Melanoma of Skin Incidence
% of Cases, By Stage of Disease at Diagnosis
Nebraska (1996-2000)



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APPENDICES

TABLE 5

Lung Cancer Incidence and Mortality
By County of Residence, Nebraska and USA (1996-2000)

	Incidence		Mortality	
	# Cases	Rate	# Deaths	Rate
USA (SEER)	NA	62.3	NA	56.1
NEBRASKA	5,477	63.5	4,391	50.5
COUNTY				
ADAMS	128	73.8	100	57.2
ANTELOPE	26	52.2	27	52.7
ARTHUR	-	-	2	*
BANNER	1	*	1	*
BLAINE	1	*	2	*
BOONE	23	48.8	19	37.0
BOX BUTTE	39	61.4	25	40.2
BOYD	7	32.7	7	30.3
BROWN	4	*	6	▼20.0
BUFFALO	108	61.9	83	47.4
BURT	42	69.5	33	50.6
BUTLER	25	41.6	20	33.9
CASS	68	56.7	68	56.7
CEDAR	26	38.8	18	▼26.2
CHASE	15	50.8	14	49.8
CHERRY	16	40.1	15	37.5
CHEYENNE	31	48.0	30	45.6
CLAY	29	62.1	23	48.5
COLFAX	22	▼28.2	17	▼20.1
CUMING	20	▼28.8	26	36.3
CUSTER	40	46.2	31	36.4
DAKOTA	74	90.6	50	61.3
DAWES	23	48.0	28	54.8
DAWSON	89	67.7	65	49.3
DEUEL	9	49.6	10	58.2
DIXON	19	42.6	12	25.4
DODGE	144	63.7	114	49.6
DOUGLAS	1,620	▲81.4	1,238	▲62.4
DUNDY	5	*	7	35.9
FILLMORE	28	57.9	27	54.6
FRANKLIN	24	81.1	21	65.4
FRONTIER	6	35.0	8	45.7
FURNAS	26	60.0	19	42.4
GAGE	79	49.7	69	43.4
GARDEN	12	67.7	10	50.4
GARFIELD	8	47.7	3	*
GOSPER	8	42.6	4	*
GRANT	1	*	2	*
GREELEY	11	53.9	8	34.3
HALL	202	73.7	154	55.6
HAMILTON	28	50.5	26	45.5
HARLAN	15	55.5	16	57.2
HAYES	5	*	3	*
HITCHCOCK	16	64.5	17	72.3
HOLT	33	38.8	33	37.4
HOOKER	2	*	1	*
HOWARD	22	52.5	20	47.2

TABLE 5
(Continued)
Lung Cancer Incidence and Mortality
By County of Residence, Nebraska and USA (1996-2000)

	Incidence		Mortality	
	# Cases	Rate	# Deaths	Rate
COUNTY				
JEFFERSON	21	▼30.0	23	35.1
JOHNSON	21	57.9	21	52.1
KEARNEY	24	62.8	22	59.3
KEITH	29	50.6	28	47.7
KEYA PAHA	2	*	1	*
KIMBALL	17	56.2	15	51.0
KNOX	27	▼35.6	21	▼25.5
LANCASTER	627	62.2	529	52.3
LINCOLN	142	74.9	107	55.8
LOGAN	1	*	-	-
LOUP	2	*	3	*
McPHERSON	1	*	2	*
MADISON	112	62.6	81	45.7
MERRICK	27	55.2	30	61.9
MORRILL	18	55.4	18	51.4
NANCE	17	62.4	14	53.6
NEMAHA	33	68.8	31	63.1
NUCKOLLS	30	62.4	28	55.7
OTOE	43	45.5	38	38.3
PAWNEE	18	63.9	14	50.0
PERKINS	17	90.1	14	70.2
PHELPS	34	57.2	24	39.4
PIERCE	19	39.0	13	26.5
PLATTE	95	74.3	75	59.2
POLK	20	48.5	14	32.2
RED WILLOW	62	80.9	43	55.2
RICHARDSON	45	61.0	34	47.6
ROCK	8	63.2	7	53.8
SALINE	47	57.5	37	46.2
SARPY	244	63.4	179	47.7
SAUNDERS	68	60.1	55	47.5
SCOTTS BLUFF	121	56.2	105	47.2
SEWARD	53	56.1	41	43.3
SHERIDAN	24	49.6	19	38.2
SHERMAN	14	51.4	8	26.6
SIOUX	5	*	7	77.0
STANTON	13	46.4	9	31.7
THAYER	19	35.7	15	▼24.7
THOMAS	2	*	-	-
THURSTON	17	48.4	15	42.6
VALLEY	17	48.7	14	34.6
WASHINGTON	61	63.1	45	46.3
WAYNE	20	39.5	13	25.1
WEBSTER	12	36.7	9	25.4
WHEELER	1	*	2	*
YORK	47	50.8	36	37.9

NA – not available
*Rate not shown if based on five or fewer events.
Rates are expressed per 100,000 population and are age-adjusted to the 2000 U.S. population

▼ county rate significantly lower than the state rate

▲ county rate significantly higher than the state rate

TABLE 6

Breast Cancer Incidence and Mortality (Females Only)
By County of Residence, Nebraska and USA (1996-2000)

	Incidence		Mortality	
	# Cases	Rate	# Deaths	Rate
USA (SEER)	NA	135.1	NA	26.7
NEBRASKA	6,057	131.8	1,290	25.9
COUNTY				
ADAMS	118	130.2	19	21.3
ANTELOPE	36	139.3	10	36.6
ARTHUR	1	*	1	*
BANNER	3	*	-	-
BLAINE	2	*	-	-
BOONE	28	137.4	9	29.0
BOX BUTTE	42	130.5	7	18.6
BOYD	10	73.9	1	*
BROWN	19	150.8	2	*
BUFFALO	123	127.7	24	21.9
BURT	32	114.4	7	26.9
BUTLER	36	126.3	9	26.7
CASS	74	115.8	14	20.7
CEDAR	33	96.8	2	*
CHASE	20	138.3	1	*
CHERRY	26	121.0	5	*
CHEYENNE	38	112.0	6	17.3
CLAY	28	110.9	4	*
COLFAX	33	84.0	6	11.4
CUMING	33	80.1	18	43.7
CUSTER	43	88.6	11	23.7
DAKOTA	57	127.5	14	28.8
DAWES	42	172.2	10	40.8
DAWSON	84	121.1	20	26.8
DEUEL	15	243.4	-	-
DIXON	18	91.4	2	*
DODGE	169	148.2	39	31.4
DOUGLAS	1,576	140.4	337	29.1
DUNDY	6	55.7	2	*
FILLMORE	29	114.6	6	20.9
FRANKLIN	22	140.9	3	*
FRONTIER	5	*	4	*
FURNAS	18	82.5	3	*
GAGE	121	145.6	30	32.0
GARDEN	22	277.8	6	55.8
GARFIELD	13	150.2	3	*
GOSPER	4	*	1	*
GRANT	1	*	-	-
GREELEY	12	108.3	4	*
HALL	178	126.1	44	28.0
HAMILTON	37	122.3	10	27.1
HARLAN	22	151.7	5	*
HAYES	3	*	1	*
HITCHCOCK	13	119.1	5	*
HOLT	46	114.1	15	37.4
HOOKER	4	*	-	-
HOWARD	15	78.2	6	22.9

TABLE 6
(Continued)
Breast Cancer Incidence and Mortality (Females Only)
By County of Residence, Nebraska and USA (1996-2000)

	Incidence		Mortality	
	# Cases	Rate	# Deaths	Rate
COUNTY				
JEFFERSON	27	79.6	10	24.3
JOHNSON	21	114.6	6	27.5
KEARNEY	18	86.1	9	41.3
KEITH	36	124.6	9	30.5
KEYA PAHA	4	*	-	-
KIMBALL	27	183.2	3	*
KNOX	21	▼63.6	1	*
LANCASTER	789	139.4	173	28.7
LINCOLN	138	138.1	27	25.6
LOGAN	7	260.4	1	*
LOUP	2	*	-	-
McPHERSON	3	*	-	-
MADISON	135	141.6	24	21.5
MERRICK	30	114.8	6	15.0
MORRILL	16	96.9	2	*
NANCE	24	149.7	4	*
NEMAHA	32	124.3	6	24.1
NUCKOLLS	30	146.9	10	36.3
OTOE	65	128.1	12	17.3
PAWNEE	20	142.5	3	*
PERKINS	12	107.8	4	*
PHELPS	45	137.4	7	22.5
PIERCE	32	116.6	7	23.3
PLATTE	146	▲197.1	22	29.1
POLK	17	81.2	4	*
RED WILLOW	31	91.6	14	35.5
RICHARDSON	45	125.1	13	30.0
ROCK	7	124.6	1	*
SALINE	53	121.2	12	25.0
SARPY	323	140.5	53	24.0
SAUNDERS	80	143.1	16	24.2
SCOTTS BLUFF	148	136.3	27	23.8
SEWARD	65	135.7	9	15.4
SHERIDAN	20	87.5	5	*
SHERMAN	10	71.1	5	*
SIOUX	4	*	1	*
STANTON	20	113.6	4	*
THAYER	31	132.2	7	26.7
THOMAS	2	*	-	-
THURSTON	14	85.9	3	*
VALLEY	17	94.2	7	28.6
WASHINGTON	64	125.0	15	29.9
WAYNE	24	85.8	9	31.6
WEBSTER	23	155.8	1	*
WHEELER	6	224.8	-	-
YORK	63	136.7	12	25.2

NA – not available
*Rate not shown if based on five or fewer events.
Rates are expressed per 100,000 female population and are age-adjusted to the 2000 U.S. population

▼ county rate significantly lower than the state rate
▲ county rate significantly higher than the state rate

TABLE 7

Colorectal Cancer Incidence and Mortality
By County of Residence, Nebraska and USA (1996-2000)

	Incidence		Mortality	
	# Cases	Rate	# Deaths	Rate
USA (SEER)	NA	53.1	NA	20.8
NEBRASKA	5,278	60.0	2,015	22.4
COUNTY				
ADAMS	96	52.1	48	25.4
ANTELOPE	29	56.5	20	36.8
ARTHUR	1	*	2	*
BANNER	2	*	-	-
BLAINE	2	*	3	*
BOONE	31	68.5	11	19.7
BOX BUTTE	38	55.8	19	27.6
BOYD	10	51.3	8	38.9
BROWN	16	58.2	6	19.1
BUFFALO	101	56.5	34	18.4
BURT	47	79.1	17	24.1
BUTLER	35	51.9	17	27.5
CASS	63	52.6	28	23.2
CEDAR	48	72.3	18	23.7
CHASE	16	54.3	11	33.2
CHERRY	21	52.7	12	26.5
CHEYENNE	33	53.3	12	17.7
CLAY	28	58.3	15	29.3
COLFAX	44	52.5	13	16.0
CUMING	43	59.6	20	24.8
CUSTER	47	57.5	18	21.1
DAKOTA	60	73.4	22	26.9
DAWES	27	54.0	12	24.3
DAWSON	57	43.0	27	20.7
DEUEL	8	43.7	3	*
DIXON	20	43.1	4	*
DODGE	180	78.6	64	26.3
DOUGLAS	1,298	65.5	445	22.7
DUNDY	17	97.2	5	*
FILLMORE	24	41.6	10	16.8
FRANKLIN	24	75.4	11	29.8
FRONTIER	16	83.2	5	*
FURNAS	19	41.3	6	11.9
GAGE	72	43.6	38	20.3
GARDEN	21	124.4	4	*
GARFIELD	9	44.3	6	28.2
GOSPER	8	41.8	1	*
GRANT	-	-	-	-
GREELEY	19	83.0	4	*
HALL	148	53.4	57	20.2
HAMILTON	23	41.1	14	24.1
HARLAN	16	48.6	10	29.6
HAYES	-	-	1	*
HITCHCOCK	13	52.9	5	*
HOLT	60	76.1	19	20.7
HOOKER	4	*	-	-
HOWARD	18	39.4	8	17.4

TABLE 7
(Continued)
Colorectal Cancer Incidence and Mortality
By County of Residence, Nebraska and USA (1996-2000)

	Incidence		Mortality	
	# Cases	Rate	# Deaths	Rate
COUNTY				
JEFFERSON	36	58.8	13	22.3
JOHNSON	30	74.5	10	24.2
KEARNEY	28	66.1	10	22.6
KEITH	30	53.3	7	11.6
KEYA PAHA	6	98.5	3	*
KIMBALL	22	80.3	6	19.1
KNOX	55	73.6	18	20.5
LANCASTER	624	61.3	217	21.2
LINCOLN	111	58.9	42	22.1
LOGAN	1	*	1	*
LOUP	3	*	4	*
McPHERSON	1	*	1	*
MADISON	127	68.2	39	20.8
MERRICK	36	68.8	19	29.3
MORRILL	11	▼27.6	4	*
NANCE	27	91.4	8	27.7
NEMAHA	37	70.4	19	32.7
NUCKOLLS	26	52.5	7	17.1
OTOE	67	64.6	32	28.5
PAWNEE	22	65.9	8	21.8
PERKINS	11	50.6	5	*
PHELPS	32	48.7	16	22.4
PIERCE	29	58.3	9	18.5
PLATTE	107	80.9	49	37.3
POLK	24	60.5	8	19.1
RED WILLOW	47	61.9	19	24.7
RICHARDSON	51	69.2	23	29.4
ROCK	8	61.0	6	45.7
SALINE	70	79.9	24	24.6
SARPY	210	55.8	75	21.4
SAUNDERS	57	51.1	21	18.9
SCOTTS BLUFF	114	51.5	41	18.2
SEWARD	53	55.6	16	16.3
SHERIDAN	28	64.7	7	14.7
SHERMAN	6	▼20.9	4	*
SIOUX	1	*	2	*
STANTON	12	39.9	4	*
THAYER	28	54.6	19	36.7
THOMAS	3	*	-	-
THURSTON	16	46.1	7	18.9
VALLEY	11	29.4	12	28.5
WASHINGTON	46	46.3	24	23.3
WAYNE	22	43.8	8	15.9
WEBSTER	18	54.7	10	24.7
WHEELER	2	*	2	*
YORK	60	63.9	23	23.1

NA – not available
*Rate not shown if based on five or fewer events.
Rates are expressed per 100,000 population and are age-adjusted to the 2000 U.S. population

TABLE 8

Prostate Cancer Incidence and Mortality
By County of Residence, Nebraska and USA (1996-2000)

	Incidence		Mortality	
	# Cases	Rate	# Deaths	Rate
USA (SEER)	NA	176.9	NA	30.6
NEBRASKA	6,197	164.9	990	28.3
COUNTY				
ADAMS	100	137.2	15	21.8
ANTELOPE	41	183.0	5	*
ARTHUR	3	*	-	-
BANNER	5	*	1	*
BLAINE	2	*	-	-
BOONE	37	170.7	2	*
BOX BUTTE	55	204.1	6	20.6
BOYD	11	92.3	1	*
BROWN	18	143.6	8	61.5
BUFFALO	163	214.1	16	21.4
BURT	56	207.8	6	20.6
BUTLER	38	149.1	13	48.7
CASS	74	133.6	14	30.5
CEDAR	47	151.2	8	24.5
CHASE	22	165.3	5	*
CHERRY	18	102.1	2	*
CHEYENNE	53	193.6	8	29.5
CLAY	40	181.2	7	31.5
COLFAX	62	175.3	6	15.7
CUMING	39	116.6	8	23.6
CUSTER	94	245.5	15	34.5
DAKOTA	35	▼98.5	12	37.9
DAWES	30	149.3	10	48.7
DAWSON	86	146.8	21	38.2
DEUEL	18	233.3	1	*
DIXON	20	108.8	6	29.2
DODGE	160	167.2	18	19.3
DOUGLAS	1,298	158.0	201	29.9
DUNDY	18	227.7	2	*
FILLMORE	38	172.1	3	*
FRANKLIN	27	190.2	6	36.2
FRONTIER	11	131.5	1	*
FURNAS	38	214.3	10	45.9
GAGE	79	120.0	25	37.3
GARDEN	12	146.8	2	*
GARFIELD	16	192.5	3	*
GOSPER	15	173.0	2	*
GRANT	3	*	-	-
GREELEY	23	238.9	2	*
HALL	201	166.5	32	27.9
HAMILTON	58	235.2	11	49.5
HARLAN	20	146.2	1	*
HAYES	2	*	2	*
HITCHCOCK	21	196.3	3	*
HOLT	79	210.5	10	26.4
HOOKER	7	296.5	2	*
HOWARD	31	160.8	7	36.9

TABLE 8
(Continued)
Prostate Cancer Incidence and Mortality
By County of Residence, Nebraska and USA (1996-2000)

	Incidence		Mortality	
	# Cases	Rate	# Deaths	Rate
COUNTY				
JEFFERSON	36	127.9	11	36.6
JOHNSON	25	171.4	6	40.3
KEARNEY	33	186.9	3	*
KEITH	45	174.0	5	*
KEYA PAHA	3	*	4	*
KIMBALL	31	220.3	2	*
KNOX	49	143.2	12	31.6
LANCASTER	740	174.5	100	27.8
LINCOLN	119	143.1	19	23.5
LOGAN	2	*	-	-
LOUP	2	*	1	*
McPHERSON	4	*	-	-
MADISON	160	210.0	22	28.4
MERRICK	41	177.2	7	28.0
MORRILL	42	274.8	4	*
NANCE	27	198.2	2	*
NEMAHA	28	134.3	4	*
NUCKOLLS	26	128.3	6	26.1
OTOE	69	161.4	11	24.7
PAWNEE	24	172.1	1	*
PERKINS	10	100.9	3	*
PHELPS	58	218.1	8	26.2
PIERCE	31	139.9	6	27.7
PLATTE	130	229.8	19	38.3
POLK	24	130.1	8	39.2
RED WILLOW	53	156.5	8	24.7
RICHARDSON	53	170.7	12	35.4
ROCK	13	218.0	4	*
SALINE	64	179.2	9	23.0
SARPY	259	152.9	40	36.8
SAUNDERS	77	148.7	19	36.2
SCOTTS BLUFF	154	154.8	17	17.9
SEWARD	54	135.7	15	37.4
SHERIDAN	34	153.3	4	*
SHERMAN	24	198.1	5	*
SIOUX	1	*	1	*
STANTON	22	167.3	6	49.4
THAYER	56	235.6	3	*
THOMAS	5	*	1	*
THURSTON	27	171.0	6	36.8
VALLEY	32	187.5	6	35.3
WASHINGTON	74	172.1	12	30.0
WAYNE	32	151.0	4	*
WEBSTER	23	156.7	3	*
WHEELER	5	*	2	*
YORK	52	133.3	10	25.6

NA – not available
*Rate not shown if based on five or fewer events.
Rates are expressed per 100,000 male population and are age-adjusted to the 2000 U.S. population

▼ county rate significantly lower than the state rate

▲ county rate significantly higher than the state rate

TABLE 9

Bladder Cancer Incidence and Mortality
By County of Residence, Nebraska and USA (1996-2000)

	Incidence		Mortality	
	# Cases	Rate	# Deaths	Rate
USA (SEER)	NA	21.3	NA	4.3
NEBRASKA	1,751	19.9	344	3.8
COUNTY				
ADAMS	43	25.0	10	5.1
ANTELOPE	8	17.2	3	*
ARTHUR	5	*	-	-
BANNER	-	-	-	-
BLAINE	1	*	1	*
BOONE	3	*	-	-
BOX BUTTE	18	24.9	7	10.1
BOYD	4	*	3	*
BROWN	6	24.7	2	*
BUFFALO	55	29.5	4	*
BURT	19	32.5	3	*
BUTLER	13	22.6	1	*
CASS	26	21.5	3	*
CEDAR	8	11.1	1	*
CHASE	4	*	-	-
CHERRY	7	15.7	2	*
CHEYENNE	14	22.7	2	*
CLAY	13	28.5	1	*
COLFAX	10	13.7	1	*
CUMING	7	10.1	3	*
CUSTER	20	21.4	4	*
DAKOTA	10	11.8	2	*
DAWES	13	28.7	5	*
DAWSON	27	19.9	4	*
DEUEL	2	*	-	-
DIXON	6	13.7	3	*
DODGE	42	18.7	12	4.6
DOUGLAS	366	18.5	81	4.1
DUNDY	5	*	2	*
FILLMORE	14	28.6	-	-
FRANKLIN	10	27.2	2	*
FRONTIER	6	34.1	-	-
FURNAS	9	17.2	-	-
GAGE	26	16.4	6	3.2
GARDEN	7	47.4	-	-
GARFIELD	1	*	-	-
GOSPER	6	34.4	-	-
GRANT	1	*	-	-
GREELEY	4	*	-	-
HALL	63	22.9	14	5.0
HAMILTON	11	19.5	1	*
HARLAN	8	25.1	4	*
HAYES	1	*	-	-
HITCHCOCK	2	*	-	-
HOLT	21	23.7	4	*
HOOKER	2	*	-	-
HOWARD	9	21.0	-	-

TABLE 9
(Continued)
Bladder Cancer Incidence and Mortality
By County of Residence, Nebraska and USA (1996-2000)

	Incidence		Mortality	
	# Cases	Rate	# Deaths	Rate
COUNTY				
JEFFERSON	13	19.3	3	*
JOHNSON	8	21.6	2	*
KEARNEY	11	26.0	2	*
KEITH	18	32.0	-	-
KEYA PAHA	1	*	1	*
KIMBALL	6	18.3	-	-
KNOX	15	16.5	3	*
LANCASTER	203	20.0	38	3.6
LINCOLN	43	23.1	10	5.3
LOGAN	1	*	-	-
LOUP	1	*	-	-
McPHERSON	1	*	-	-
MADISON	50	25.9	8	3.5
MERRICK	16	27.8	3	*
MORRILL	6	16.1	1	*
NANCE	2	*	-	-
NEMAHA	6	11.3	3	*
NUCKOLLS	8	16.8	1	*
OTOE	22	21.5	6	4.9
PAWNEE	9	28.4	2	*
PERKINS	6	30.2	1	*
PHELPS	15	23.3	1	*
PIERCE	13	23.0	1	*
PLATTE	26	20.3	5	*
POLK	9	19.9	1	*
RED WILLOW	11	13.9	2	*
RICHARDSON	10	13.7	3	*
ROCK	2	*	-	-
SALINE	13	15.0	2	*
SARPY	66	18.1	14	4.5
SAUNDERS	15	13.1	6	4.9
SCOTTS BLUFF	68	31.9	13	5.7
SEWARD	14	14.6	2	*
SHERIDAN	6	14.0	3	*
SHERMAN	5	*	2	*
SIOUX	1	*	1	*
STANTON	7	25.2	-	-
THAYER	8	13.4	-	-
THOMAS	-	-	-	-
THURSTON	4	*	-	-
VALLEY	8	17.9	5	*
WASHINGTON	10	9.4	3	*
WAYNE	8	13.5	1	*
WEBSTER	8	20.5	3	*
WHEELER	3	*	-	-
YORK	19	20.3	1	*

NA – not available
*Rate not shown if based on five or fewer events.
Rates are expressed per 100,000 population and are age-adjusted to the 2000 U.S. population

TABLE 10

Non-Hodgkin Lymphoma Incidence and Mortality
By County of Residence, Nebraska and USA (1996-2000)

	Incidence		Mortality	
	# Cases	Rate	# Deaths	Rate
USA (SEER)	NA	19.0	NA	8.2
NEBRASKA	1,710	19.8	799	8.9
COUNTY				
ADAMS	30	17.3	14	7.4
ANTELOPE	13	24.5	4	*
ARTHUR	1	*	1	*
BANNER	-	-	-	-
BLAINE	-	-	-	-
BOONE	16	33.3	2	*
BOX BUTTE	16	23.7	6	8.2
BOYD	3	*	1	*
BROWN	7	25.1	3	*
BUFFALO	33	18.3	19	10.4
BURT	15	24.7	8	11.7
BUTLER	10	18.0	6	8.9
CASS	28	23.1	11	9.2
CEDAR	10	15.4	3	*
CHASE	5	*	2	*
CHERRY	12	30.0	3	*
CHEYENNE	16	27.8	7	11.0
CLAY	9	18.7	5	*
COLFAX	11	14.2	3	*
CUMING	7	10.8	3	*
CUSTER	17	21.1	5	*
DAKOTA	15	17.9	5	*
DAWES	7	14.9	3	*
DAWSON	17	12.9	7	5.3
DEUEL	4	*	1	*
DIXON	14	35.2	10	21.3
DODGE	49	22.7	20	8.4
DOUGLAS	398	19.7	192	9.7
DUNDY	5	*	2	*
FILLMORE	7	16.1	5	*
FRANKLIN	6	22.9	2	*
FRONTIER	5	*	1	*
FURNAS	11	20.6	8	14.7
GAGE	26	16.9	18	10.7
GARDEN	2	*	-	-
GARFIELD	1	*	-	-
GOSPER	3	*	1	*
GRANT	-	-	-	-
GREELEY	5	*	2	*
HALL	49	18.7	26	9.6
HAMILTON	7	13.4	4	*
HARLAN	6	21.3	5	*
HAYES	-	-	1	*
HITCHCOCK	8	29.2	6	20.5
HOLT	9	11.0	3	*
HOOKER	2	*	-	-
HOWARD	13	30.0	5	*

TABLE 10
(Continued)
Non-Hodgkin Lymphoma Incidence and Mortality
By County of Residence, Nebraska and USA (1996-2000)

	Incidence		Mortality	
	# Cases	Rate	# Deaths	Rate
COUNTY				
JEFFERSON	16	25.3	9	12.6
JOHNSON	8	21.1	5	*
KEARNEY	4	*	5	*
KEITH	9	16.5	4	*
KEYA PAHA	1	*	2	*
KIMBALL	4	*	3	*
KNOX	8	10.2	3	*
LANCASTER	220	21.2	99	9.7
LINCOLN	36	20.1	13	6.5
LOGAN	-	-	-	-
LOUP	2	*	1	*
McPHERSON	-	-	-	-
MADISON	29	14.9	23	11.4
MERRICK	11	22.3	5	*
MORRILL	10	31.1	2	*
NANCE	4	*	2	*
NEMAHA	9	19.7	5	*
NUCKOLLS	15	38.1	9	22.0
OTOE	21	23.5	12	10.6
PAWNEE	7	22.6	4	*
PERKINS	2	*	3	*
PHELPS	10	17.0	6	9.2
PIERCE	14	28.2	5	*
PLATTE	38	28.2	16	12.2
POLK	6	14.1	2	*
RED WILLOW	14	21.6	5	*
RICHARDSON	10	13.8	9	11.7
ROCK	3	*	1	*
SALINE	19	23.3	7	7.1
SARPY	71	15.7	20	5.6
SAUNDERS	32	29.5	10	8.4
SCOTTS BLUFF	36	17.0	19	8.2
SEWARD	29	31.5	11	10.9
SHERIDAN	3	*	6	12.9
SHERMAN	7	35.8	1	*
SIOUX	1	*	1	*
STANTON	3	*	2	*
THAYER	18	33.5	7	14.1
THOMAS	1	*	-	-
THURSTON	4	*	1	*
VALLEY	3	*	4	*
WASHINGTON	24	25.2	17	17.4
WAYNE	5	*	2	*
WEBSTER	3	*	2	*
WHEELER	-	-	1	*
YORK	12	14.4	2	*

NA – not available
*Rate not shown if based on five or fewer events.
Rates are expressed per 100,000 population and are age-adjusted to the 2000 U.S. population

TABLE 11

Leukemia Incidence and Mortality
By County of Residence, Nebraska and USA (1996-2000)

	Incidence		Mortality	
	# Cases	Rate	# Deaths	Rate
USA (SEER)	NA	11.9	NA	7.7
NEBRASKA	1,111	12.7	714	8.0
COUNTY				
ADAMS	13	8.1	10	5.4
ANTELOPE	7	11.3	4	*
ARTHUR	-	-	-	-
BANNER	1	*	-	-
BLAINE	1	*	-	-
BOONE	5	*	3	*
BOX BUTTE	3	*	6	7.9
BOYD	1	*	1	*
BROWN	3	*	1	*
BUFFALO	20	11.7	11	6.4
BURT	7	14.2	6	9.3
BUTLER	11	20.5	8	13.9
CASS	15	12.5	9	7.5
CEDAR	8	13.7	4	*
CHASE	4	*	2	*
CHERRY	9	24.6	5	*
CHEYENNE	12	20.1	6	9.6
CLAY	7	14.4	5	*
COLFAX	12	13.8	9	8.1
CUMING	8	12.0	3	*
CUSTER	12	13.4	5	*
DAKOTA	15	17.8	11	13.3
DAWES	4	*	4	*
DAWSON	16	13.2	6	4.9
DEUEL	-	-	-	-
DIXON	6	12.9	3	*
DODGE	33	15.4	16	6.7
DOUGLAS	255	12.5	174	8.7
DUNDY	2	*	2	*
FILLMORE	7	13.4	3	*
FRANKLIN	5	*	1	*
FRONTIER	2	*	1	*
FURNAS	3	*	2	*
GAGE	12	8.0	7	4.2
GARDEN	2	*	2	*
GARFIELD	4	*	2	*
GOSPER	-	-	-	-
GRANT	1	*	-	-
GREELEY	2	*	1	*
HALL	29	10.5	26	9.2
HAMILTON	7	12.5	6	9.2
HARLAN	3	*	3	*
HAYES	-	-	-	-
HITCHCOCK	5	*	2	*
HOLT	7	7.9	5	*
HOOKER	3	*	-	-
HOWARD	8	17.3	6	14.0

TABLE 11
(Continued)
Leukemia Incidence and Mortality
By County of Residence, Nebraska and USA (1996-2000)

	Incidence		Mortality	
	# Cases	Rate	# Deaths	Rate
COUNTY				
JEFFERSON	8	12.0	3	*
JOHNSON	5	*	3	*
KEARNEY	3	*	4	*
KEITH	7	11.6	7	11.8
KEYA PAHA	-	-	-	-
KIMBALL	4	*	3	*
KNOX	9	11.4	8	8.7
LANCASTER	134	12.9	88	8.5
LINCOLN	29	16.0	14	7.7
LOGAN	-	-	-	-
LOUP	-	-	-	-
McPHERSON	1	*	-	-
MADISON	30	16.6	20	10.2
MERRICK	4	*	-	-
MORRILL	3	*	1	*
NANCE	6	22.6	3	*
NEMAHA	3	*	1	*
NUCKOLLS	11	22.3	9	19.7
OTOE	5	*	6	5.9
PAWNEE	2	*	2	*
PERKINS	4	*	4	*
PHELPS	7	11.6	4	*
PIERCE	7	13.4	4	*
PLATTE	24	18.4	17	12.9
POLK	10	29.3	2	*
RED WILLOW	15	20.6	9	10.7
RICHARDSON	10	15.5	2	*
ROCK	2	*	1	*
SALINE	9	10.5	7	8.7
SARPY	57	13.5	25	6.7
SAUNDERS	7	6.6	6	5.2
SCOTTS BLUFF	28	13.9	19	9.1
SEWARD	16	17.7	12	12.5
SHERIDAN	2	*	3	*
SHERMAN	4	*	2	*
SIOUX	-	-	1	*
STANTON	2	*	3	*
THAYER	11	18.8	6	12.8
THOMAS	-	-	-	-
THURSTON	6	19.4	4	*
VALLEY	3	*	5	*
WASHINGTON	12	11.8	12	11.7
WAYNE	10	20.3	5	*
WEBSTER	4	*	2	*
WHEELER	-	-	2	*
YORK	7	7.6	4	*

NA – not available
*Rate not shown if based on five or fewer events.
Rates are expressed per 100,000 population and are age-adjusted to the 2000 U.S. population

TABLE 12

Oral Cavity & Pharynx Cancer Incidence and Mortality
By County of Residence, Nebraska and USA (1996-2000)

	Incidence		Mortality	
	# Cases	Rate	# Deaths	Rate
USA (SEER)	NA	10.6	NA	2.7
NEBRASKA	879	10.3	178	2.0
COUNTY				
ADAMS	27	16.5	6	3.4
ANTELOPE	7	14.2	2	*
ARTHUR	-	-	-	-
BANNER	-	-	-	-
BLAINE	-	-	-	-
BOONE	6	15.7	1	*
BOX BUTTE	9	13.0	2	*
BOYD	-	-	-	-
BROWN	2	*	-	-
BUFFALO	23	12.8	5	*
BURT	5	*	-	-
BUTLER	5	*	1	*
CASS	7	5.8	3	*
CEDAR	4	*	-	-
CHASE	2	*	-	-
CHERRY	4	*	1	*
CHEYENNE	11	20.3	6	9.8
CLAY	2	*	1	*
COLFAX	6	9.6	1	*
CUMING	5	*	1	*
CUSTER	12	12.2	2	*
DAKOTA	16	19.1	2	*
DAWES	7	17.8	1	*
DAWSON	9	6.7	3	*
DEUEL	3	*	1	*
DIXON	2	*	-	-
DODGE	18	8.5	7	3.0
DOUGLAS	218	10.8	49	2.5
DUNDY	2	*	-	-
FILLMORE	5	*	-	-
FRANKLIN	4	*	-	-
FRONTIER	3	*	1	*
FURNAS	3	*	1	*
GAGE	12	7.9	2	*
GARDEN	2	*	-	-
GARFIELD	1	*	2	*
GOSPER	3	*	-	-
GRANT	-	-	-	-
GREELEY	2	*	2	*
HALL	27	10.4	4	*
HAMILTON	6	10.6	2	*
HARLAN	3	*	-	-
HAYES	-	-	1	*
HITCHCOCK	1	*	-	-
HOLT	7	9.0	-	-
HOOKER	-	-	-	-
HOWARD	3	*	2	*

TABLE 12
(Continued)
Oral Cavity & Pharynx Cancer Incidence and Mortality
By County of Residence, Nebraska and USA (1996-2000)

	Incidence		Mortality	
	# Cases	Rate	# Deaths	Rate
COUNTY				
JEFFERSON	4	*	2	*
JOHNSON	5	*	1	*
KEARNEY	4	*	2	*
KEITH	6	11.3	-	-
KEYA PAHA	-	-	-	-
KIMBALL	3	*	-	-
KNOX	4	*	-	-
LANCASTER	101	9.9	16	1.6
LINCOLN	17	9.2	5	*
LOGAN	3	*	1	*
LOUP	-	-	-	-
McPHERSON	-	-	-	-
MADISON	18	10.3	4	*
MERRICK	8	14.8	2	*
MORRILL	6	18.1	-	-
NANCE	4	*	1	*
NEMAHA	5	*	1	*
NUCKOLLS	2	*	1	*
OTOE	7	6.6	3	*
PAWNEE	2	*	-	-
PERKINS	2	*	1	*
PHELPS	2	*	-	-
PIERCE	6	12.7	-	-
PLATTE	17	12.9	2	*
POLK	2	*	-	-
RED WILLOW	7	10.0	3	*
RICHARDSON	4	*	-	-
ROCK	-	-	-	-
SALINE	6	7.8	-	-
SARPY	37	9.4	6	1.5
SAUNDERS	13	11.6	2	*
SCOTTS BLUFF	34	16.2	-	-
SEWARD	8	8.8	1	*
SHERIDAN	7	18.4	3	*
SHERMAN	2	*	2	*
SIOUX	-	-	-	-
STANTON	5	*	2	*
THAYER	4	*	-	-
THOMAS	-	-	-	-
THURSTON	8	23.1	1	*
VALLEY	1	*	-	-
WASHINGTON	9	9.0	2	*
WAYNE	4	*	-	-
WEBSTER	3	*	1	*
WHEELER	1	*	-	-
YORK	4	*	1	*

NA – not available
*Rate not shown if based on five or fewer events.
Rates are expressed per 100,000 population and are age-adjusted to the 2000 U.S. population

TABLE 13

Skin Melanoma Incidence and Mortality
By County of Residence, Nebraska and USA (1996-2000)

	Incidence		Mortality	
	# Cases	Rate	# Deaths	Rate
USA (SEER)	NA	17.7	NA	2.7
NEBRASKA	1,231	14.8	233	2.7
COUNTY				
ADAMS	17	10.2	8	4.5
ANTELOPE	9	18.6	-	-
ARTHUR	-	-	-	-
BANNER	1	*	-	-
BLAINE	-	-	-	-
BOONE	3	*	1	*
BOX BUTTE	9	14.0	3	*
BOYD	2	*	1	*
BROWN	2	*	-	-
BUFFALO	25	13.8	6	3.6
BURT	4	*	-	-
BUTLER	4	*	-	-
CASS	21	17.3	2	*
CEDAR	6	9.5	-	-
CHASE	9	36.5	1	*
CHERRY	7	19.9	1	*
CHEYENNE	8	15.7	-	-
CLAY	-	-	-	-
COLFAX	12	14.3	4	*
CUMING	8	13.9	-	-
CUSTER	18	26.1	3	*
DAKOTA	12	13.3	3	*
DAWES	4	*	2	*
DAWSON	10	7.7	2	*
DEUEL	2	*	-	-
DIXON	6	15.1	4	*
DODGE	22	11.9	4	*
DOUGLAS	315	14.9	50	2.5
DUNDY	3	*	1	*
FILLMORE	6	16.8	3	*
FRANKLIN	3	*	-	-
FRONTIER	2	*	-	-
FURNAS	7	19.7	1	*
GAGE	21	15.5	4	*
GARDEN	1	*	-	-
GARFIELD	2	*	-	-
GOSPER	-	-	-	-
GRANT	2	*	1	*
GREELEY	2	*	-	-
HALL	38	14.9	9	3.3
HAMILTON	11	20.5	4	*
HARLAN	6	34.8	2	*
HAYES	-	-	1	*
HITCHCOCK	9	45.7	2	*
HOLT	13	16.5	2	*
HOOKER	2	*	-	-
HOWARD	1	*	-	-

TABLE 13
(Continued)
Skin Melanoma Incidence and Mortality
By County of Residence, Nebraska and USA (1996-2000)

	Incidence		Mortality	
	# Cases	Rate	# Deaths	Rate
COUNTY				
JEFFERSON	12	22.0	2	*
JOHNSON	1	*	-	-
KEARNEY	2	*	-	-
KEITH	12	26.5	3	*
KEYA PAHA	-	-	-	-
KIMBALL	1	*	1	*
KNOX	8	15.8	-	-
LANCASTER	168	15.8	23	2.3
LINCOLN	27	15.9	5	*
LOGAN	-	-	-	-
LOUP	-	-	-	-
McPHERSON	-	-	-	-
MADISON	24	14.1	7	4.1
MERRICK	6	13.7	-	-
MORRILL	4	*	6	17.8
NANCE	4	*	2	*
NEMAHA	8	18.1	-	-
NUCKOLLS	6	13.0	-	-
OTOE	13	17.0	3	*
PAWNEE	2	*	-	-
PERKINS	4	*	1	*
PHELPS	10	16.3	4	*
PIERCE	1	*	1	*
PLATTE	13	9.2	3	*
POLK	4	*	1	*
RED WILLOW	14	19.9	1	*
RICHARDSON	15	27.3	1	*
ROCK	1	*	-	-
SALINE	9	13.0	4	*
SARPY	87	18.2	17	4.4
SAUNDERS	14	14.0	2	*
SCOTTS BLUFF	36	17.2	7	3.3
SEWARD	13	15.7	3	*
SHERIDAN	5	*	-	-
SHERMAN	1	*	1	*
SIOUX	-	-	-	-
STANTON	3	*	1	*
THAYER	3	*	-	-
THOMAS	-	-	-	-
THURSTON	3	*	1	*
VALLEY	2	*	-	-
WASHINGTON	16	16.6	3	*
WAYNE	3	*	1	*
WEBSTER	3	*	-	-
WHEELER	-	-	-	-
YORK	9	12.6	4	*

NA – not available
*Rate not shown if based on five or fewer events.
Rates are expressed per 100,000 population and are age-adjusted to the 2000 U.S. population

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Participants in the Nebraska Cancer Registry
(City--Facility)

Ainsworth--Brown County Hospital
Albion--Boone County Health Center
Alliance--Box Butte General Hospital
Alma--Harlan County Health System
Atkinson--West Holt Memorial Hospital, Inc.
Auburn--Nemaha County Hospital
Aurora--Memorial Hospital
Bassett--Rock County Hospital
Beatrice--Beatrice Community Hosp. & Hlth. Ctr., Inc.
Benkelman--Dundy County Hospital
Blair--Memorial Community Hospital
Bridgeport--Morrill County Community Hospital
Broken Bow--Jennie M. Melham Mem. Med. Ctr., Inc.

Callaway--Callaway District Hospital
Cambridge--Tri Valley Health System
Central City--Litzenberg Memorial County Hospital
Chadron--Chadron Community Hosp. & Hlth. Svcs.
Columbus--Columbus Community Hospital, Inc.
Cozad--Cozad Community Hospital
Creighton--Creighton Area Health Services
Crete--Crete Area Medical Center
David City--Butler County Health Care Center
Fairbury--Jefferson County Health Center, Inc.
Falls City--Community Medical Center, Inc.
Franklin--Franklin County Memorial Hospital
Fremont--Fremont Area Medical Center
Friend--Warren Memorial Hospital
Geneva--Fillmore County Hospital
Genoa--Genoa Community Hospital/LTC
Gordon--Gordon Memorial Hospital District
Gothenburg--Gothenburg Memorial Hospital and LTC
Grand Island--St. Francis Medical Center
Grant--Perkins County Health Services
Hastings--Mary Lanning Memorial Hospital
Hebron--Thayer County Memorial Hospital
Henderson--Henderson Health Care Services
Holdrege--Phelps Memorial Health Center
Imperial--Chase County Community Hospital
Kearney--Good Samaritan Hospital
Kearney--Good Samaritan Hospital Pathology
Kimball--Kimball County Hospital
Lexington--Tri-County Area Hospital District
Lincoln--Bryan LGH East & West
Lincoln--Saint Elizabeth Regional Medical Center
Lincoln--Pathology Medical Services
Lincoln--Williamsburg Radiation Center
Lynch--Niobrara Valley Hospital Corp.
McCook--Community Hospital
Minden--Kearney County Health Services-Hospital
Nebraska City--St. Mary's Hospital
Neligh--Antelope Memorial Hospital
Norfolk--Faith Regional Health Services
North Platte--Great Plains Regional Medical Center
North Platte--Pathology Services, P.C.
Oakland--Oakland Memorial Hospital
Offutt AFB--Ehrling Berquist Hospital
Ogallala--Ogallala Community Hospital
Omaha--Alegent Health Bergan Mercy Medical Ctr.
Omaha--Alegent Health Immanuel Medical Center
Omaha--Children's Hospital
Omaha--Methodist Hospital Pathology Center
Omaha--Nebraska Health System
Omaha--Nebraska Methodist Hospital
Omaha--St. Joseph Hospital
Omaha—Dept. of Veteran’s Affairs Medical Center
Omaha--Bergan Mercy Medical Ctr. Pathology
Omaha--Bishop Clarkson Hospital Pathology
Omaha--Creighton Pathology Associates
Omaha--Nichols Institute
Omaha--Physicians Lab
O'Neill--St. Anthony's Hospital
Ord--Valley County Hospital
Osceola--Annie Jeffrey Memorial County Hlth. Ctr.
Oshkosh--Garden County Health Services
Osmond--Osmond General Hospital
Papillion--Alegent Health Midlands Community Hosp.
Pawnee City--Pawnee County Memorial Hospital
Pender--Pender Community Hospital
Plainview--Plainview Public Hospital
Red Cloud--Webster County Community Hospital
Schuyler--Alegent Health-Memorial Hospital
Scottsbluff--Regional West Medical Center
Scottsbluff--Western Pathology Consultants
Seward--Memorial Hospital
Sidney--Memorial Health Center
St. Paul--Howard County Community Hospital
Superior--Brodstone Memorial Nuckolls Co. Hosp.
Syracuse--Community Memorial Hospital
Tecumseh--Johnson County Hospital
Tilden--Tilden Community Hospital
Valentine--Cherry County Hospital
Wahoo--Saunders County Community Hospital
Wayne--Providence Medical Center
West Point--St. Francis Memorial Hospital
Winnebago--U.S. Public Hlth. Service Indian Hospital
York--York General Hospital

Other States:
Rapid City, SD--Rapid City Regional Hospital
Sioux Falls, SD--Sioux Valley Hospital
Yankton, SD--Sacred Heart Hospital
Sioux City, IA--Mercy Medical Center

State cancer registries of Colorado, Iowa, Kansas, Missouri, and Wyoming